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DEPARTMENT OF REGISTRATION AND EDUCATION

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1959

PETROLEUM INDUSTRY IN ILLINOIS IN 1957

Part I. Oil and Gas Developments

Part II. Waterflood Operations

Alfred H. Bell
Virginia Kline
Carl W. Sherman

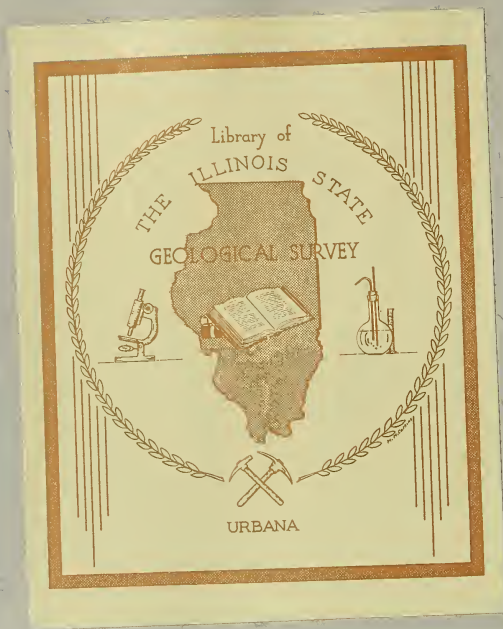
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BULLETIN 85

ILLINOIS STATE GEOLOGICAL SURVEY

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ILLINOIS STATE GEOLOGICAL SURVEY



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ILLINOIS STATE GEOLOGICAL SURVEY BULLETIN 85

Urbana, Illinois

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PETROLEUM INDUSTRY IN ILLINOIS, 1957

ALFRED H. BELL, VIRGINIA KLINE, and CARL W. SHERMAN

PART I OIL AND GAS DEVELOPMENTS

ABSTRACT

Illinois produced 76,649,000 barrels of oil in 1957, a decrease of 7 percent from the 82,314,000 barrels produced in 1956; the decrease marks a change in trend following three years of steadily increasing production beginning in 1954. The 2585 wells completed in 1957 represent a 29 per cent decrease from the 3640 wells drilled in 1956. The decrease in production was due partly to decline in drilling but mostly to refinery strikes during the summer which forced temporary shut-downs in some pools.

Forty-one percent of the 1957 completions were successful. Fifteen new oil pools, one gas pool, 51 extensions to pools, and 16 new pays were discovered in 1957.

Reserves are estimated at 667.3 million barrels on January 1, 1958, 34.3 million barrels below the estimate for January 1, 1957.

INTRODUCTION

The purpose of this report on the petroleum industry in Illinois in 1957 is to set forth, in a form convenient for reference, as much information as possible on oil and gas development, production, economics, exploratory drilling, discoveries, reserves, and on the geologic occurrence of oil and gas. This report is an expansion of a summary report covering similar ground in the annual volume "Statistics of Oil and Gas Development and Production," published by the Society of Petroleum Engineers of the American Institute of Mining and Metallurgical Engineers.

Developments are discussed by county. The county maps showing oil pools, which were included in Bulletins 79, 81, and 83, have been omitted but the set (on a scale of 4 miles to the inch) may be purchased separately. The table of oil producing strata, published as table 11 in Bulletin 83, has been omitted but will be included in the bulletin for 1958.

We gratefully acknowledge the cooperation of the many oil companies and individuals who contributed basic data for this report. The part on estimated petroleum reserves was prepared by Margaret Oros and Lester L. Whiting of the Illinois State Geological Survey's Oil and Gas Section and the part on gas and gas products by

Whiting and Wayne F. Meents of the same section. J. Van Den Berg and Ronald A. Younker, both of the Survey staff, also assisted in preparing the report.

Part II on waterflood operations was prepared by Carl Sherman, assisted by Donald A. Pierre and Anthony Richards of the Petroleum Engineering Section. Tables and maps are based on data furnished by the operators through the Illinois Secondary Recovery and Pressure Maintenance Study Committee of the Interstate Oil Compact Commission.

PRODUCTION AND VALUE

Oil production in Illinois in 1957 was 76,649,000 barrels, a decrease of 7 percent from the 82,314,000 barrels produced in 1956. However, Illinois remained in eighth place among the oil-producing states.

The 1956 production was the highest since 1943. Peak production was attained in 1940, after which production gradually declined to a low of 59,025,000 barrels in 1953, increased to the 1956 peak, and in 1957 declined by 5,665,000 barrels. Some decline had been anticipated because production had begun leveling off in late 1956.

Major cause of the production decline was a strike by five refineries of the Standard Oil Company of Ohio that began June 7. Shipments of crude oil by Sohio Pipe

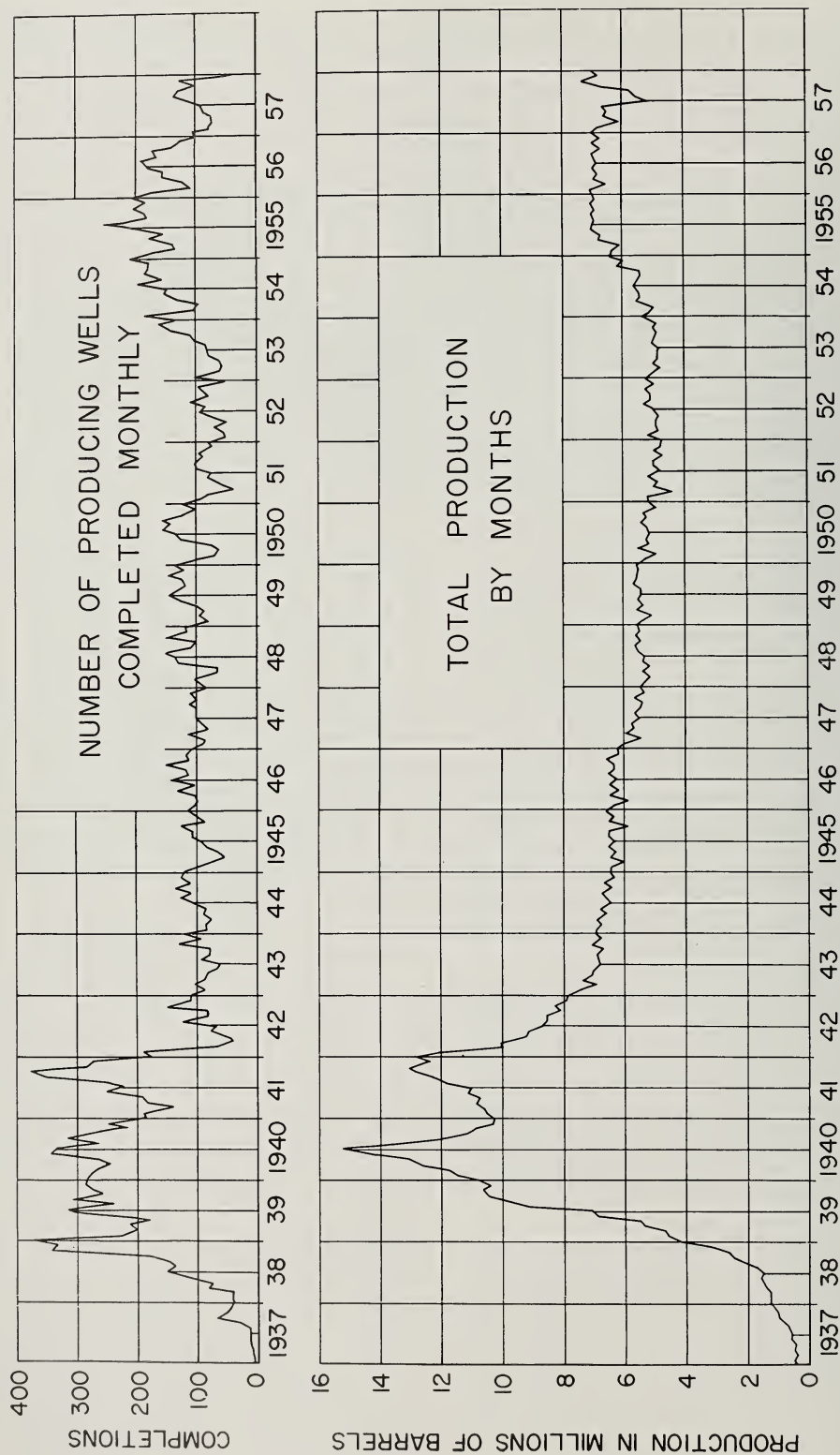


Fig. 1. — Oil production in Illinois, 1937-1957.

Line, the largest oil transportation company in Illinois, were stopped until emergency outlets for the oil could be found. In some cases entire pools were temporarily shut down. During June and July, daily average production dropped to a low of 40,000 to 50,000 barrels below normal. For a short time in October, after the refineries reopened, daily production was high (238,000 b.p.d.) while storage tanks were emptied. Probably about two-thirds of the 5,665,000 barrel drop in production for the year was the result of the refinery shut down, and the actual loss in productive capacity was much smaller than it appears to be.

Daily average production by months was as follows:

Month	Barrels	Month	Barrels
January . . .	216,000	July . . .	179,000
February . . .	217,000	August . . .	185,000
March . . .	213,000	September . . .	222,000
April . . .	217,000	October . . .	238,000
May . . .	213,000	November . . .	226,000
June . . .	171,000	December . . .	224,000

At the beginning of 1957, most of the crude oil in Illinois was selling at \$2.90 per barrel. A 25-cent increase in January raised the price to \$3.15 per barrel, where it remained for about 11 months. In mid-December, purchasers of crude oil began cutting the price to \$3.00. At the end of the year both prices (\$3.00 and \$3.15) were in effect. Value (at the wells) of crude oil produced in Illinois in 1957 was about \$239,911,000. To this should be added the value of natural gasoline and liquefied petroleum gas extracted from Illinois natural gas, estimated at \$3,000,000, making a total of \$242,911,000.

DRILLING AND DEVELOPMENT

A total of 2,585¹ wells were drilled for oil and gas in Illinois in 1957 (tables 1 and 2), a decrease of 29 percent from the 3,640 wells drilled in 1956. Of the 2,585 wells

TABLE 1.—WELL COMPLETIONS AND OIL PRODUCTION SINCE JANUARY 1, 1936

Period of time	Number of completions ^a	Number of producing wells	Production (M bbls.) ^b		
			New fields	Old fields ^c	Total
1936 . . .	93	52			4,445
1937 . . .	449	292	2,884	4,542	7,426
1938 . . .	2,536	2,010	19,771	4,304	24,075
1939 . . .	3,617	2,970	90,908	4,004	94,912
1940 . . .	3,755	3,080	142,969	4,678	147,647
1941 . . .	3,807	2,925	128,993	5,145	134,138
1942 . . .	2,017	1,179	101,837	4,753	106,590
1943 . . .	1,791	1,090(20) ^d	77,581	4,675	82,256
1944 . . .	1,991	1,229(12)	72,946	4,467	77,413
1945 . . .	1,763	1,094(15)	70,839	4,371	75,210
1946 . . .	2,362	1,387(17)	70,174	5,123	75,297
1947 . . .	2,046	1,102(22)	61,455	5,004	66,459
1948 . . .	2,489	1,316(21)	59,623	5,185	64,808
1949 . . .	2,741	1,447(32)	58,571	5,930	64,501
1950 . . .	2,894	1,328(23)	55,794	6,234	62,028
1951 . . .	2,383	947(23)	54,147	6,097	60,244
1952 . . .	2,077	854(35)	53,727	6,344	60,071
1953 . . .	2,161	1,161(88)	51,924	7,101	59,025
1954 . . .	3,254	1,896(107)	59,130	7,810	66,940
1955 . . .	3,885	2,164(62)	72,016	9,115	81,131
1956 . . .	3,640	1,742(85)	71,645	10,669	82,314
1957 . . .					
Jan. . .	224	105(1)	5,875	826	6,701
Feb. . .	168	76(2)	5,308	773	6,081
March . . .	189	70(2)	5,766	831	6,597
Apr. . .	176	70(3)	5,671	851	6,522
May . . .	207	87(4)	5,773	840	6,613
June . . .	229	89(4)	4,365	753	5,118
July . . .	224	86(5)	4,702	850	5,552
Aug. . .	291	133(4)	4,923	807	5,730
Sept. . .	251	124(3)	5,856	807	6,663
Oct. . .	239	101(5)	6,501	873	7,374
Nov. . .	263	124(10)	5,937	831	6,768
Dec. . .	124	49(3)	6,074	856	6,930
	2,585	1,114(46)	66,751	9,898	76,649

^a Includes only oil and gas producers and dry holes; no service wells.

^b Production figures based on Illinois Basin Scout Association's Pipe Line Production Report.

^c Includes Devonian production at Sandoval and Bartleso.

^d Figures in parentheses refer to number of producing wells included in totals which previously had been completed as dry holes.

completed in 1957, 1,045 were oil wells, 23 were gas, 793 were dry holes in pools, and 724 were unsuccessful wildcats. No gas was marketed from the gas wells.

The percentage of successful well completions has been decreasing for the past three years: from 55 percent in 1955 to

¹Well completion figures are based on reports received from the Illinois Basin Scout Association. An undetermined number of additional wells were completed in the old fields of Clark, Crawford, Cumberland, Lawrence, and adjoining counties, for the most part in waterflood areas.

TABLE 2.—SUMMARY OF DRILLING AND INITIAL PRODUCTION BY COUNTIES, 1957^a

County	Number of wells drilled						Total initial production		Footage drilled	
	Total completions		Total producing		Total dry holes					
			Oil	Gas	In pools	Wildcat near ^b	Wildcat far ^c	Oil (bbls.)	Gas (MMcf.)	Producing wells
	Adams	13	0	3	2	2	6	0	1,200	1,422
Alexander	2	0	0	0	0	2	0	0	0	990
Bond	65	16	0	28	13	8	336	0	15,343	104,309
Brown	6	0	0	0	0	6	0	0	0	4,730
Bureau	1	0	0	0	0	1	0	0	0	2,702
Champaign	4	0	0	0	0	4	0	0	0	3,649
Christian	111	59	0	22	8	22	8,725	0	109,377	216,951
Clark	84	45	0	29	6	4	1,259	0	54,423	97,488
Clay	103	46	0	39	17	1	3,384	0	126,479	297,016
Clinton	83	19	3	10	29	22	899	1,550	48,965	183,662
Coles	60	27	0	11	8	14	6,504	0	50,732	97,574
Crawford	158	75	2	72	9	0	4,015	1,500	87,886	208,095
Cumberland	8	1	0	3	0	4	2	0	380	9,687
DeWitt	1	0	0	0	0	1	0	0	0	1,404
Douglas	115	51	0	28	20	16	14,146	0	87,211	190,973
Edgar	16	2	0	2	5	7	6	0	858	10,460
Edwards	37	10	0	14	13	0	608	0	30,762	147,685
Effingham	42	12	0	13	8	9	683	0	30,070	110,347
Fayette	23	8	0	3	4	8	447	0	13,074	58,116
Ford	6	0	0	0	0	6	0	0	0	4,317
Franklin	63	31	0	18	11	3	4,358	0	93,411	194,992
Gallatin	81	51	0	23	5	2	2,421	0	123,271	205,668
Hamilton	158	71	0	58	25	4	17,282	0	184,496	522,948
Hancock	2	0	0	0	0	2	0	0	0	2,507
Jackson	4	0	0	2	0	2	0	0	0	5,830
Jasper	56	29	0	16	9	2	1,705	0	72,269	144,169
Jefferson	89	36	0	33	16	4	4,385	0	103,147	257,018
Johnson	1	0	0	0	0	1	0	0	0	926
Kankakee	1	0	0	0	0	1	0	0	0	2,343
LaSalle	1	0	0	0	0	1	0	0	0	3,659

Lawrence	147	93	0	45	5	4	3,552	0	149,346	249,467
Macon	16	5	0	5	5	1	478	0	33,125	33,125
Macoupin	12	0	0	1	4	7	0	0	11,100	11,100
Madison	20	1	0	3	4	12	7	0	590	30,432
Marion	82	42	0	24	10	6	4,569	0	123,965	228,369
Mercer	2	0	0	0	0	2	0	0	0	4,060
Montgomery	44	0	1	4	10	29	0	0.055	620	65,996
Morgan	2	0	0	1	0	1	0	0	0	2,343
Moultrie	11	0	0	0	2	11	0	0	0	27,392
Perry	31	8	0	6	10	7	181	0	12,146	49,903
Piatt	1	0	0	0	0	1	0	0	0	2,031
Pike	25	0	10	3	3	9	0	4.015	5,693	14,449
Pope	3	0	0	0	0	3	0	0	0	4,533
Randolph	6	1	0	2	1	2	14	0	1,637	11,998
Richland	41	21	0	13	7	0	659	0	62,298	127,605
St. Clair	16	1	4	3	3	5	3	11.060	1,852	19,711
Saline	75	27	0	21	24	3	4,412	0	80,703	226,194
Sangamon	26	1	0	6	4	15	58	0	1,770	45,117
Schuyler	3	0	0	0	0	3	0	0	0	2,402
Shelby	26	5	0	3	5	13	146	0	9,702	55,128
Tazewell	1	0	0	0	0	1	0	0	0	1,080
Union	2	0	0	0	0	2	0	0	0	2,574
Wabash	109	40	0	59	10	0	3,895	0	99,695	270,059
Washington	85	30	0	20	26	9	909	0	46,422	147,454
Wayne	174	90	0	59	25	0	9,031	0	287,276	568,162
White	187	81	0	80	25	1	9,579	0	239,451	387,244
Williamson	44	10	0	9	8	17	1,040	0	26,451	131,276
Total	2,585	1,045	23	793	397	327	109,698	19.380	2,394,117	5,817,721

^a Does not include input wells, salt-water disposal wells, or old wells worked over.

^b Wells drilled between one-half and two miles from production.

^c Wells drilled more than two miles from production.

45.5 in 1956, to 41 percent in 1957. The percentage of total wildcat completions shows an opposite trend, increasing from 22 percent in 1955 to 28 percent in 1956, to 30.6 percent in 1957.

POOL DEVELOPMENT

Wells were drilled for oil or gas in 57 counties; 17 of these counties had only wildcat drilling, 40 had pool development drilling (table 2).

There was no great concentration of drilling. In most years several counties have 200 or 300 wells completed. In 1957 White County ranked first with 187 completions, followed by Wayne, Hamilton, Crawford, Lawrence, Douglas, Christian, Wabash, and Clay counties. About half of the drilling for 1957 was done in these nine counties, each of which had at least 100 completions. Coles County, which ranked first in 1956 with 266 completions, dropped to 19th place in 1957 with only 60 completions.

From 1942 until 1955 drilling was mostly confined to the southeastern part of the state. The only important exception was in 1946 when the Mattoon pool was being developed in Coles County. In 1955 and 1956 drilling moved to the northern margin of the producing area as the Decatur-Mt. Auburn and Cooks Mills areas were being developed. In 1957 Chesterville East, apparently the best new pool of the year, was discovered. By early fall the pools along the northern margin seemed to be almost completely drilled up. Extensive wildcatting failed to open up any new prospects, and by the end of the year most drilling was again in the southern part of the basin.

Development wells were scattered more than usual. Only four pools had 50 or more new producing wells: Lawrence and Clay City Consolidated each had 85 new producers, Main Consolidated had 78, and Dale Consolidated had 62.

Depths of producing wells drilled in 1957 ranged from about 350 to 4000 feet. Average depth of all wells drilled was about 2,200 feet.

In fields discovered since January 1, 1937, there were 22,656 wells producing oil or gas at the end of 1957; in older fields the number is estimated at 8,967. This figure is uncertain because many wells have been abandoned without being plugged or have been converted into water wells or input wells for secondary recovery. The total number of oil and gas wells in the state at the end of 1957 was about 31,623.

EXPLORATORY DRILLING

Wildcat wells were drilled in all of the 57 counties where drilling was done in 1957. New pools were discovered in 12 counties: four in Williamson County, two in Perry, and one in each of ten other counties. Williamson County had had no previous commercial production. One producing well (Marion pool) was completed several years ago but produced a total of only a few hundred barrels of oil. All four of the new Williamson County oil fields are in the extreme northern part of the county within five miles of Franklin or Saline counties. The largest pool, Corinth, had seven wells producing at the end of the year.

Of the 2,585 wells drilled in 1957, 788 were wildcats. These included 338 drilled more than two miles from production, 11 of which discovered new pools, about 3.3 percent successful (table 3). The 450 wildcats drilled between half a mile and two miles from production discovered five new pools and 48 extensions to pools, making them 11.8 percent successful. Three more extensions were discovered by working over wells previously completed as dry holes.

TABLE 3.—WILDCAT WELLS DRILLED IN 1957

Category	Total	Producers	Percentage successful
Wildcat Near ^a	450	53	11.8
Wildcat Far ^b	338	11	3.3
Total	788	64*	8.2

^a From ½ to 2 miles from production.

^b More than 2 miles from production.

* Three of the extension wells listed in table 5 were originally completed as dry holes and later worked over.

TABLE 4.—DISCOVERY WELLS OF NEW POOLS IN 1957

Line no.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production ^a (bbls.)	Date of completion	No. wells producing in pool 12/31/57
1	Beverly (Gas)	Adams	G. & W. Oil Co. #1 Binson	10-3S-5W	425	Silurian	415	218,000 cu. ft.	2-28	2 ^b
2	Chesterville E.	Douglas	Pierce & Zuhome #2 S. L. Munson	6-14N-8E	1746	Rosiclare	1723	787	7-23	40
3	Clifford	Williamson	Rehn-Calvert #2 Rehn Old Ben Coal Co. "B"	11-8S-1E	2625; PB 2561	Aux Vases Rosiclare McClosky	2373 2520 2538	20; 18	1-22	1
4	Corinth	Williamson	R. Bartmes #1 H. H. Roberts	21-8S-4E	3018; PB 2905	Aux Vases	2886	50; 1	6-25	7
5	Corinth E.	Williamson	W. W. Dayton #1 R. Mann	23-8S-4E	3113; PB 3046	McClosky	3034	120	4-30	1
6	Corinth N.	Williamson	Phillips Pet. #1 Madison Coal Co. "A"	6-8S-4E	3180; PB 2949	Aux Vases	2933	20; 27	2-19	1
7	Deering City	Franklin	P. Mosebach #2 Peabody-Mosebach	9-7S-3E	2875	Aux Vases	2823	135; 30	9-10	2
8	Exchange W.	Marion	R. Fletcher #1 T. Sawyer	3-1N-3E	2779; PB 2680	McClosky	2664	51	7-23	2
9	Gila	Jasper	Misener Drlg. Co. #1 Parker	32-8N-9E	2918; PB 2800	McClosky	2849	14	11-19	1
10	Grayson	Saline	Mt. Carmel Drlg. Co. #1 Bartok	34-8S-7E	3024; PB 2925	Cypress McClosky	2512 2918	70	2-12	2
11	New Douglas S.	Bond	Nat'l Associated Pet. #1-A F. J. Zeller	35-6N-5W	649	Pennsylvanian	642	20	11-12	1
12	New Memphis E.	Washington	C. E. Brehm #1 M. Garlich	6-1S-4W	2280; PB 2200	Silurian	2172	45	11-5	1
13	Roby W.	Sangamon	V.S. & S. Drlg. Co. #1 Spicer	6-15N-3W	1782	Silurian	1656	58	9-17	1
14	Tamaroa S.	Perry	C. Bassett #1 J. H. Bagwell	28-4S-1W	1184; PB 1160	Cypress	1152	28; 100	1-29	7
15	Turkey Bend	Perry	E. A. Obering #1 Kaul	10-4S-2W	4044; PB 3975	Trenton	3937	25; 26	2-12	1
16	Watson	Effingham	Slagter Prod. #1 S. Wenthe	24-7N-5E	2647; PB 2429	Rosiclare	2414	60; 60	12-10	1

^a Oil and water.^b Shut in.

TABLE 5.—DISCOVERY WELLS OF EXTENSIONS TO POOLS, 1957
C = Consolidated

Line no.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production ^a (bbls.)	Date of completion
1	Aden C.	Wayne	Whaley Oil Co. #1 Gallagher-Green	22-2S-7E	3388; PB 3279	Aux Vases	3236	214	9-17
2	Ashley	Washington	Louden Pipe Line #1 Denbeaux	31-2S-1W	1469	Bethel	1463	6; 30	12-3
3	Barnhill	Wayne	Texas #1 L. Johnson Unit	16-3S-8E	3592; PB 3517	McClosky	3470	35; 38	1-22
4	Blackland	Christian	Reeter & Hirstein #1 G. Bettrell	1-15N-1W	1960; PB 1940	Silurian	1922	6; 30	12-3
5	Burnt Prairie S.	White	Skiles Oil #1 I. Miller, et al.	18-4S-9E	3545; PB 3500	McClosky	3468	49	8-13
6	Chesterville E.	Douglas	Emsminger & Parrish #1 Ramsey	5-14N-8E	1736	Rosiclare	1719	20	9-17
7	Clay City C.	Jasper	J. W. Rudy #1 A. M. Kesler	11-6N-10E	2719	McClosky	2699	75	11-12
8	Clay City C.	Jasper	M. L. Van Fossan #1 Dale Newlin	25-6N-9E	2990	McClosky	2985	98	4-23
9	Cooks Mills C.	Coles	Kenneth A. James #2 Moore	35-14N-7E	1838; PB 1810	Rosiclare	1796	46; 12	10-8
10	Dale C.	Hamilton	Keystone Oil #1 Burnett	1-7S-5E	3239; PB 3200	Aux Vases	3182	250	6-18
11	Dale C.	Hamilton	C. E. Brehm #1 Perry	20-6S-5E	3278	Aux Vases	3244	85	9-10
12	Dale C.	Hamilton	C. E. Brehm #1 M. C. Moore	36-6S-5E	3235; PB 3225	Aux Vases	3200	400	4-23
13	Dale C.	Saline	C. E. Brehm #1 Harris Comm.	29-7S-5E	3161	Aux Vases	3134	100	9-24
14	Dale C.	Franklin	C. E. Brehm #1 Westbrook "O"	1-7S-4E	3210; PB 3200	Aux Vases	3181	50	1-22
15	Dundas E.	Richland	Irving Nagel #1 E. Phillips	35-5N-10E	2953	Rosiclare	2921	33	4-16
16	Eberle	Effingham	P. Fulk #1 A. M. Woody	14-6N-6E	2809; PB 2756	Rosiclare	2711	113	5-28
17	Eldorado C.	Saline	Breuer & Curran #1 R. W. Bourland	9-8S-7E	2938	Aux Vases	2927	56	7-30
18	Ellery C.	Wayne	E. Savage #1 M. C. Johnson	1-2S-9E	3408; PB 3342	Ohara	3320	10-45	7-16
19	Fairman	Marion	T. M. Conrey #1 O. Hill Comm.	8-3N-1E	1482	Bethel	1475	24	9-17
20	Gards Point C.	Wabash	Dee-Watson Drilg. Co. #1 S. Seibert	14-1N-14W	2836	Ohara	2831	148	8-6
21	Goldengate N. C.	Wayne	E. T. Robinson #1 Allison	4-2S-9E	3436; PB 3370	McClosky	3358	12; 16	4-9
22	Goldengate N. C.	Wayne	T. G. Jenkins, et al. #1 Hoffee	12-2S-8E	3456; PB 3421	McClosky	3413	20	4-16
23	Greenville	Bond	F. L. Strickland #1 A. V. Hentz, et al.	15-5N-3W	3184; PB 2260	Devonian	2241	30	10-8
24	Half Moon	Wayne	A. C. Davis #1 J. E. Smith	35-1S-9E	3386; PB 3320	Ohara	3394	195	2-5
25	Harco	Saline	Fitch Bros. #1 E. Abney	20-8S-5E	3120; PB 2957	Aux Vases	2929	3½; 20	9-10
26	Harristown	Macon	D. Carroll #1 Schwiek-Aberson-Smith Comm.	23-16N-1E	2053	Silurian	2034	17; 2	11-19
27	Huey S.	Clinton	Nat'l Assoc. Pet. #1 H. V. Schlafly	36-2N-3W	2647	Devonian-Silurian	2592	8	10-1
28	Ina	Jefferson	Kewanee Oil #1 Jeff	23-4S-2E	3502; PB 2683	Renault	2644	90	11-26
29	Ina	Jefferson	Nash Redwine #1 Jefferson Oil & Gas	26-4S-2E	3290; PB 3060	St. Louis	3043	120; 4	2-19
30	Inman E. C.	Gallatin	G. Engle #1 Wood-Wischart, et al.	21-7S-10E	2980	St. Louis	2960	75; 1	9-24

31	Inman W. C.	Gallatin	V. R. Gallagher #1 Bradley Comm.	17-8S-9E	2730; PB 1765	Biehl	1752	20	4-30
32	Iuka.	Marion	Texas #1 H. L. Featherly Unit	15-2N-4E	2800; PB 2720	McClosky	2685	30; 24	1-15
33	Johnsonville W.	Wayne	T. R. Lindsay #1 E. Legg	2-1S-5E	3099	McClosky	3080	84	10-1
34	Main C.	Crawford	F. S. Stephenson, Jr., #1 D. Crebs	22-7N-12W	1045	Pennsylvanian	1008	1,000,000 cu. ft.	9-17
35	Maunie N. C.	White	C. C. White #1 Phelps, Rice, Rogers Unit	30-5S-14W	3111; PB 3070	Aux Vases	2969	432	1-15
36	Mt. Auburn C.	Christian	Henson Drlg. #1 Housley	30-15N-1W	1986	Silurian	1914	11; 5	12-10
37	Omaha E.	Gallatin	R. S. Thompson #4 Davis	1-8S-8E	2980; PB 2540	Cypress	2530	96; 35	11-26
38	Oskaloosa	Clay	Breuer & Curran #1 L. Spencer	26-4N-5E	2763	McClosky	2755	10; 14	11-26
39	Raleigh	Saline	W. Duncan #1 Roy Jones	10-8S-6E	3110; PB 3040	Rosiclare	3023	113; 4	2-5
40	Raleigh S.	Saline	R-K Petro. #1 McConnell	29-8S-6E	3030; PB 2872	Aux Vases	2848	76; 25	11-12
41	Reservoir	Jefferson	Cullum & Lawhead #1 Wilson	30-1S-3E	2628; PB 2525	McClosky	2506	20; 60	4-16
42	Roby	Sangamon	J. C. Hajuk #1 J. W. Taft	10-15N-3W	1761; PB 1722	Silurian	1689	13; 4	7-30
43	Sailor Springs Central	Clay	Texas #1 L. Noll	30-4N-8E	3044; PB 3020	McClosky	3008	149	7-9
44	Sailor Springs C.	Clay	Robison Oil #1 L. Benskin "A"	6-3N-7E	3135; PB 3024	Ohara	2988	45; 10	7-2
45	Salem C.	Marion	Higgins & Whittinghill #1 M. Bruce	34-1N-2E	2201	Rosiclare	2177	110; 20	10-1
46	Sicily	Christian	M. Fesser #1 Clark	14-13N-4W	1826	Silurian	1811	160	2-12
47	Sorento C.	Bond	F. L. Strickland #1 C. S. Harmon	29-6N-4W	1895; PB 1870	Lingle	1854	21; 10	4-30
48	Thompsonville E.	Franklin	R-K Petro. Co. #1 Bundy, et al. Comm.	2-7S-4E	3141	Aux Vases	3135	40	12-23
49	Trumbull	White	Calvert Drlg. #2 Mitchell Consol.	12-5S-8E	3360	McClosky	3250	172; 10	8-6
50	Trumbull	White	H. Sackett-Ashland #1 Ward	19-5S-9E	3333; PB 3150	Aux Vases	3142	28; 43	7-23
51	Whittington W.	Franklin	Kewanee Oil #2 Plains	2-5S-2E	2942; PB 2720	Renault	2689	250	1-8

^a Oil and water.

TABLE 6.—DISCOVERY WELLS OF NEW PAYS IN POOLS, 1957
C = Consolidated

Line no.	Pool	County	Company and farm	Location	Total depth (ft.)	Producing formation	Depth to top (ft.)	Initial production ^a (bbls.)	Date of completion
1	Ab Lake	Gallatin	W. Duncan #1 L. E. Osburn	29-8S-10E	2020	Waltersburg	1994	4½; 26	10-8
2	Ab Lake	Gallatin	P. S. Knight #1 Geo. Golden	32-8S-10E	2783; PB 894	Pennsylvanian	805	25	5-14
3	Christopher C. . . .	Franklin	Nat'l Assoc. Pet. #1 Lindsay-Moschino "H"	14-6S-1E	4538	St. Louis	2998	132; 169 ^b	7-23
4	Clarksburg	Shelby	Partlow & Cochonour #1 Strohl	8-10N-4E	3206; PB 1791	Aux Vases	1772	25; 28	10-1
5	Corinth	Williamson	Gulf Oil #1 Henry Mitchell	21-8S-4E	3150; PB 3041	Rosiclare	2988	186; 30 ^b	8-27
6	Fairman	Marion	Nat'l Assoc. Pet. #1 A. Ververs	18-3N-1E	4052; PB 4012	Trenton	3946	82	5-14
7	Greenville	Bond	F. L. Strickland #1 A. V. Hentz, et al.	15-5N-3W	3184; PB 2260	Devonian	2241	30	10-8
8	Hill E.	Effingham	Reiss & Coslet #3 Horath	12-6N-6E	2802; PB 2665	Aux Vases	2651	10; 70	10-8
9	Ina	Jefferson	F. L. Strickland #2 Gilbert	25-4S-2E	3260; PB 2798	Rosiclare	2776	180	11-19
10	Ina	Jefferson	F. L. Strickland #1 Gilbert	25-4S-2E	3260; PB 3230	Salem	3174	140	1-15
11	Inman E.	Gallatin	Geo. S. Engle #1 Wood-Wisheart, et al.	21-7S-10E	2980	St. Louis	2960	75; 1	9-24
12	Odin	Marion	Wausau Pet. #1-D R. Young	7-2N-2E	3525; PB 2100	McClosky	2084	75	12-17
13	Omaha E.	Gallatin	R. S. Thompson #1 Davis	1-8S-8E	2980; PB 2540	Cypress	2530	96; 35	11-26
14	Oskaloosa	Clay	Preuer & Curran #1 L. Spencer	26-4N-5E	2763	McClosky	2755	10; 14	11-26
15	Phillipstown S. . . .	White	W. W. Toler #1 John Brown Comm.	11-5S-10E	3104; PB 3070	McClosky	3066	23; 10	10-8
16	Raccoon Lake	Marion	Texas #2 C. Langenfeld	3-1N-1E	1927	Bethel	1715	64; 56 ^c	8-27

^a Oil and water.^b Producing from 2 pays.^c Producing from 3 pays.

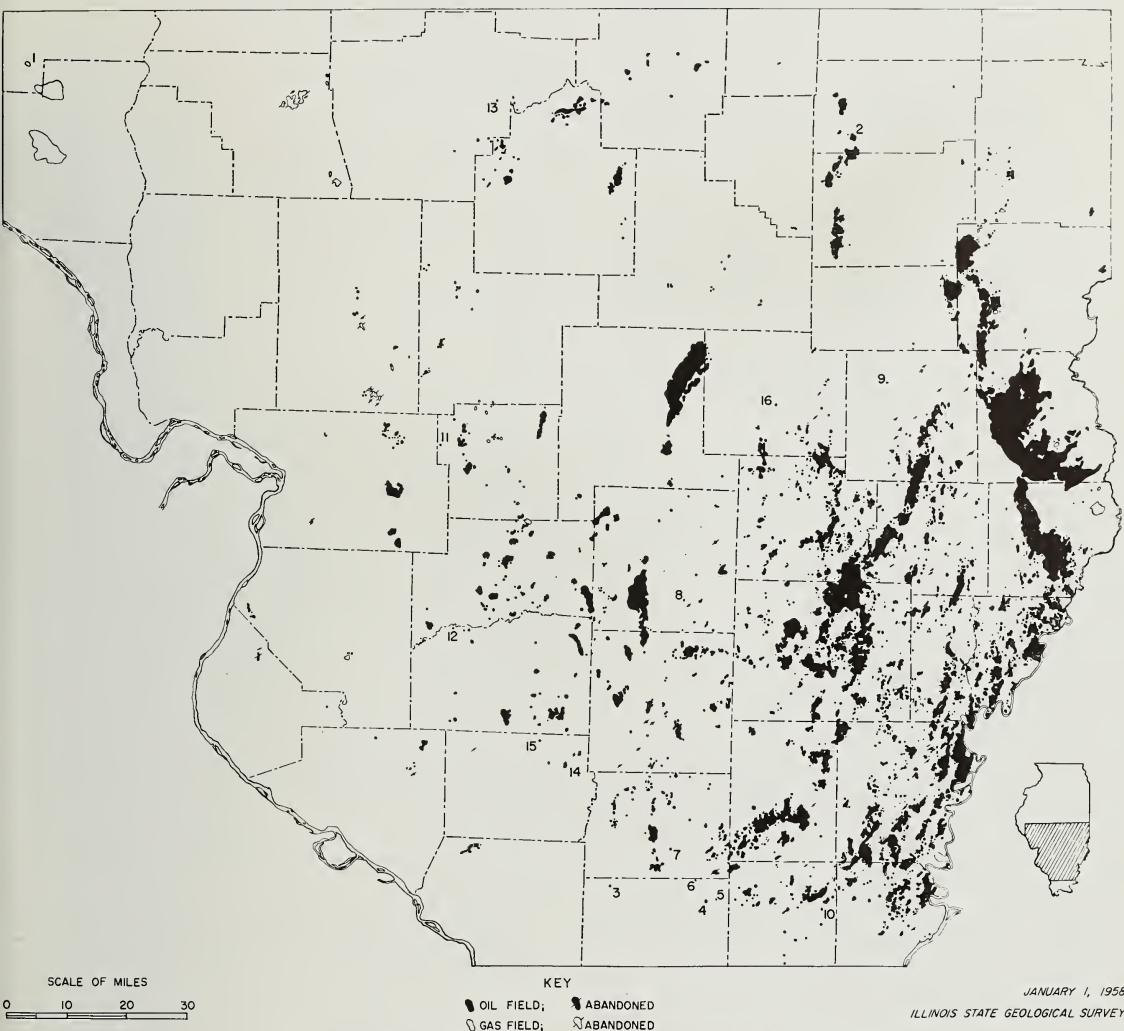


Fig. 2. — Oil pools discovered in Illinois in 1957.

- | | | |
|----------------------|------------------|-----------------------|
| 1. Beverly Gas | 6. Corinth North | 11. New Douglas South |
| 2. Chesterville East | 7. Deering City | 12. New Memphis |
| 3. Clifford | 8. Exchange West | 13. Roby West |
| 4. Corinth | 9. Gila | 14. Tamaroa South |
| 5. Corinth East | 10. Grayson | 15. Turkey Bend |
| | | 16. Watson |

The 15 new oil pools and one new gas pool are listed in table 4 and shown in figure 2. The 51 new extensions to pools are listed in table 5, and the 16 new pays in table 6. At the end of the year the 15 new oil pools had 69 wells, and the one new gas pool, Beverly pool in Adams County, had two capped gas wells. Forty of the 69 new oil wells were in the Chesterville East

pool in Douglas County. Corinth in Williamson County and Tamaroa South in Perry County each had seven wells, and the remaining 12 pools had a total of 15 wells.

The distribution of the new pools is shown in figure 2. All but one, Exchange West (No. 8) in Marion County, are near the edges of the present oil area.

TABLE 7.—SELECTED LIST OF UNSUCCESSFUL DEEP TESTS, 1957

Line no.	Pool	County	Company and farm	Location	Total depth (ft.)	Deepest formation	Depth to top (ft.)	Date of completion
1	Mt. Auburn C.	Christian	H. F. Robison #1 F. Long	24-15N-2W	2537	Trenton	2430	9-24 ^a
2	Martinsville	Clark	Athene Devel. Corp. #1 C. A. Pence	31-10N-13W	3428	St. Peter	3422	4-18
3	Bartelso E.	Clinton	General American Oil #1 Simonton	26-1N-3W	3775	Decorah	3760	8-13 ^b
4	Beckemeyer	Clinton	Schiermann & Imming #1 Beckemeyer	27-2N-3W	2572	Devonian	2521	2-12
5	Posey	Clinton	L. Kapp et al., #2 Lampen	16-1N-2W	2782	Devonian	2672	1-20
6		Coles	Magnolia #1 M. T. Rodda	4-11N-9E	5389	Knox	5370	11-5
7		LaSalle	R. W. Lawinger #1 Anna Miller	1-36N-4E	3659	Granite	3469	8-6
8	Livingston S.	Madison	Jet Oil #1 Pirox-Hodapp Comm.	4-5N-6W	1798	Devonian	1720	12-3
9		Mercer	H. L. Kelly #1 Fullerton	19-13N-4W	3410	Granite wash	3252	12-17
10	Fishhook	Pike	Pike County Gas Assoc. #2 Conkright	4-4S-4W	1212	Shakopee	1208	11-5
11	Roby W.	Sangamon	A. Valter #1 Dierks, et al.	5-15N-3W	2259	Trenton	2121	10-22
12	Stewardson	Shelby	Doran Oil Prop. #2 G. Chaffee	27-10N-5E	3509	Devonian	3332	9-17 ^a
13	New Harmony C.	Wabash	W. J. King #1 M. Keen	9-2S-13W	4567	Devonian	4436	2-19

^a Plugged back to production.

^b Abandoned producer drilled deeper.

^c Consolidated.

Discoveries of new pools or new pays in the Pennsylvanian were insignificant in 1957. One of the new one-well pools, New Douglas South in Bond County, was completed in a Pennsylvanian sandstone, and a Pennsylvanian pay was discovered in the Ab Lake pool in Gallatin County.

Eight of the new pools are in Mississippian sandstones and limestones, which range in age from Cypress to McClosky. This group includes the three best new pools: Chesterville East, Corinth, and Tamaroa South. Thirteen of the 16 new pays are also in the Mississippian; five of them in Chester sandstones and eight in Ste. Genevieve, St. Louis, and Salem Limestones.

Since 1950 Silurian and Devonian pools have been discovered more frequently than in the previous decade, but these newer pools are not comparable to Centralia, Salem, and Marine in either number of Devonian wells or volume of oil produced. In 1957 Silurian and Devonian discoveries were comparatively insignificant. Three of the new pools (the two-well Beverly gas pool and the one-well Roby West and New Memphis East pools) are completed in Silurian-Devonian strata. In the abandoned Greenville Gas pool a Devonian oil well was drilled and then abandoned at the end of the year.

The only new Trenton pool in 1957 was Turkey Bend in Perry County, another of the one-well pools. A new Trenton pay in the Fairman pool in Marion and Clinton counties is probably the most important non-Mississippian discovery for 1957.

In 1956 a new Trenton pay was discovered at the southwest end of the Patoka pool in Marion County. The Fairman Trenton is about two miles from the Patoka Trenton and is within 10 miles of Salem and Centralia, the best Trenton pools in the state.

A generalized geologic column for the southern Illinois oil region, indicating principal producing strata, is shown in figure 3.

A selected list of unsuccessful deep tests in pools and three stratigraphically deep wildcats is given in table 7.

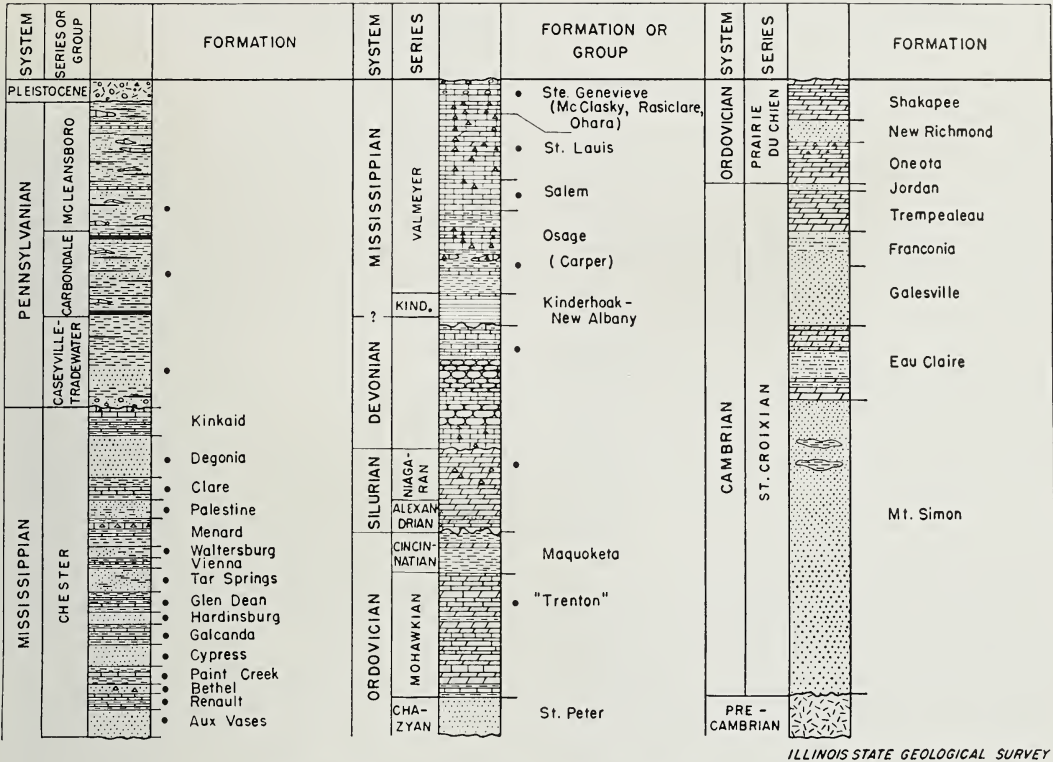


Fig. 3. — Generalized geologic column for the southern Illinois oil region. Black dots identify oil-producing strata.

Geophysical exploration, which had almost ceased in 1955 and 1956, increased in 1957 (table 8). The seismograph method

was most commonly used, but a little gravity meter work also was done.

PRODUCTIVE ACREAGE

The area of proved production in Illinois, including abandoned pools, at the end of 1957 was 550,305 surface acres for oil and 30,425 for gas. Most of the gas acreage should be considered as reserve rather than productive acreage because most of the gas wells were shut-in immediately and no gas was marketed from them. Of the total acreage, 385,520 oil acres and 18,070 gas acres were in pools discovered since January 1, 1937. During 1957, about 10,990 oil acres were added: 1,250 in pools discovered before January 1, 1937, and 9,740 in pools discovered after that date, including the 1957 new pools. New gas wells, most of which were capped, added 1,630 acres in 1957.

TABLE 8.—NUMBER OF GEOPHYSICAL AND CORE DRILLING CREWS ACTIVE IN ILLINOIS DURING 1957 BY MONTHS

Month	Seismo-graph	Gravity meter	Magne-tometer	Core drill
Jan.	4	0	0	6
Feb.	4	0	0	8
Mar.	2	0	0	7
Apr.	0	0	0	8
May.	0	0	0	9
June.	0	4	0	11
July.	1	0	0	3
Aug.	6	0	0	2
Sept.	10	0	0	4
Oct.	12	0	0	9
Nov.	8	2	0	10
Dec.	4	0	0	0

ESTIMATED PETROLEUM RESERVES

The Illinois State Geological Survey estimates that on January 1, 1958, Illinois oil reserves that can be produced from wells now in existence, by methods now in use, total 667.3 million barrels. This is a decline of 34.3 million barrels from the estimate for January 1, 1957. The factors in this change are shown below:

	Millions of bbls.
Estimated reserves, Jan. 1, 1957.	701.6
Withdrawal by 1957 production	76.6
	625.0
Added by new drilling in 1957	27.0
	652.0
Added by upward revision	15.3
Estimated reserves, Jan. 1, 1958.	667.3

The 1,159 oil-producing wells, including 70 workover wells that had formerly been producing wells and 44 holes formerly completed as dry holes, completed during 1957 added an estimated oil reserve of 27.0 million barrels, an average of about 23,209 barrels per well. During 1956 new reserves added by new drilling amounted to 47.4 million barrels.

A comparison of the new reserves added in each major geological system during 1956 and 1957 is given below:

	1956	1957
	(percent)	(percent)
Pennsylvanian System	2.0	4.0
Mississippian System	81.3	84.3
Devonian and Silurian Systems	15.8	7.4
Ordovician System ("Trenton" production)	0.9	4.3
	100.0	100.0

The Aux Vases Sandstone, with 33.6 percent, is credited with the greatest amount of new reserves added for one pay zone. The Ste. Genevieve Formation was second, accounting for 28.1 percent; of this the Rosiclare Sandstone contributed 15.1 percent of the added reserves. The "Trenton" Limestone is credited with 4.3 percent of the new reserves, a large increase from the approximate 0.9 percent estimated for this pay during 1956. The Aux Vases and Ste. Genevieve Formations were also important

during 1956, contributing 30.1 percent and 31.6 percent, respectively, to the new reserves.

The reserves added by the 15 new oil pools discovered during 1957 are estimated at 2,745,000 barrels of oil. This figure is approximately half the reserve figure of 5,209,000 barrels estimated for the 17 new oil pools discovered during 1956. A comparison of the estimated new field reserves by pays for 1956 and 1957 is given below:

	1956	1957
	(percent)	(percent)
Pennsylvanian	less than 1	less than 1
Cypress	1.0	3.7
Aux Vases	5.2	15.5
Ste. Genevieve	32.0	79.1
Devonian and Silurian	60.8	less than 1
"Trenton"	less than 1	less than 1

Rosiclare Sandstone is responsible for 75.6 percent of the 79.1 percent estimated new pool reserves in the Ste. Genevieve Formation.

During 1957 six of the fifteen new discoveries were in the extreme southern portion of the Illinois oil-producing area. Four of these were in Williamson County, which formerly had only one producing well. The discovery well of the Clifford pool in Williamson County was credited with production from three pay zones, and the Grayson pool discovery well, in Saline County, was reported to be producing from two pay zones.

GAS AND GAS PRODUCTS

An estimated 26.8 billion cubic feet of gas was produced from Illinois wells during 1957, either as solution gas or in separate gas reservoirs in the oil areas.

Most of the 94,492,000 cubic feet of gas marketed in Carmi and Eldorado was obtained from dry gas wells within oil fields. As shown in the following chart, an additional 1,110,857,000 cubic feet of dry gas or casing-head gas, much of which was formerly flared, was delivered to gas pipe lines for distribution throughout the state.

About 5.3 billion cubic feet of solution gas from Illinois oil wells was processed during 1957 by the three principal operating companies, with the resultant produc-

tion of 1,214,100 barrels of natural gasoline and allied products. Approximately 158,000,000 cubic feet of dry residue gas was returned to the producing formations, the remainder being used as plant or lease fuel. The amount of gas flared at the plants was insignificant. These figures do not include natural gasoline or allied products produced at one plant in Illinois that processes gas from outside the state and returns the dry residue gas to the pipe line.

In addition to the 5.3 billion cubic feet of metered solution gas processed, a somewhat smaller amount of unmetered gas was used, largely for lease fuel. It is estimated that about 20 billion cubic feet was flared at the wells during the year.

Twenty-one new gas wells (not including two wells too small to be commercial) located in eight pools in six different counties were completed during 1957. Combined initial open-flow capacity for eighteen of these wells amounted to 18,920,500 cubic feet daily, with no initial gauge reported for the other three. Sandstones in the lower part of the Pennsylvanian System and in the Cypress Formation of Mississippian age, limestone in the Middle Devonian, and the Edgewood Dolomite of Lower Silurian age serve as the reservoir rocks. None of this gas has been marketed for use away from the producing area.

GAS PRODUCED IN ILLINOIS AND MARKETING IN 1957

<i>Field, County</i>	<i>Market</i>	<i>Amount used (cu. ft.)</i>
Eldorado Consolidated, Saline	Eldorado	50,939,000
Herald Consolidated, White- Gallatin	Carmi	43,553,000
Eldorado Consolidated, Saline	Pipe lines	749,328,000
Harco, Saline	Pipe lines	361,529,000
		<hr/> 1,205,349,000

UNDERGROUND GAS STORAGE

The storage of natural gas underground¹ to provide reserve supplies upon which to draw when demand exceeds the capacity of available pipe lines to deliver has been of increasing importance in the United States for more than ten years. At first only

the producing formations in abandoned oil or gas fields were used as storage reservoirs, but later the industry began to use water-bearing rock formations in large closed structures. An outstanding example is the Herscher dome, Kankakee County, Illinois².

Injection of gas into the Galesville sandstone at the approximate depth of 1700 feet in the Herscher dome began April 1, 1953. It was believed that the Galesville would have a storage capacity for gas of 93 billion cubic feet. However, because of leaks from the reservoir which were discovered four months after injection began, the actual storage capacity was found to be 31 billion cubic feet, about half of which is usable.

All of the gas stored in the Herscher dome originates outside of Illinois and is brought in by two principal pipelines owned by (1) The Natural Gas Pipeline Company of America, and (2) The Texas Illinois Natural Gas Pipeline Company.

The gas storage at Herscher was successfully used in the winter season of 1957-1958 in supplying the extra demands of Chicago consumers during cold weather.

Exploratory drilling of a deeper formation in the Herscher dome, the Mt. Simon formation at the approximate depth of 2600 feet, was carried on during 1957, and about December 1, 1957, experimental injection of gas into the Mt. Simon was begun. It is estimated that the Mt. Simon reservoir may hold as much as 70 billion cubic feet, of which half would be usable.

Gas is also being stored in previous oil- or gas-producing formations in the Waterloo anticline in Monroe County near St. Louis, and is to be stored in the Cooks Mills area, Coles County.

Underground gas storage sites are being sought by gas companies in many parts of Illinois and it is likely that many more gas storage operations will be undertaken.

¹Robert B. Bizal, More gas being stored underground: Oil and Gas Journal, Tulsa, Okla., May 12, 1958, pp. 84-88.
²Anonymous, Herscher Dome — Gas storage despite leak: Oil and Gas Journal, Tulsa, Okla., Aug. 18, 1958, pp. 114-116.

TABLE 9.—ILLINOIS OIL AND GAS POOLS*
JANUARY 1, 1958
C = Consolidated

Pool: County	Twp.—Range	Pool: County	Twp.—Range
Ab Lake: Gallatin . . .	8S; 10E	Bogota: Jasper . . .	6N; 9E
Ab Lake W: Gallatin . . .	8-9S; 9-10E	Bogota N: Jasper . . .	6N; 9E
Aden C: Wayne, Hamilton	2-3S; 7E	Bogota S: Jasper . . .	5-6N; 9E
Aden S: Hamilton . . .	3S; 7E	Bone Gap C: Edwards . . .	1S; 10-11E, 14W
Akin: Franklin . . .	6S; 4E	Bone Gap E: Edwards . . .	1S; 14W
Akin W: Franklin . . .	6S; 4E	Bone Gap W: Edwards . . .	1S; 10E
Albion Central: Edwards . . .	2S; 10E	Boulder: Clinton . . .	2-3N; 2W
Albion C: Edwards, White . . .	1-3S; 10-11E, 14W	Boulder E: Clinton . . .	3N; 1W
Albion E: Edwards . . .	2S; 14W	Bourbon: Douglas . . .	15N; 7E
Albion W: Edwards . . .	3S; 10E	Bourbon N: Douglas . . .	15N; 7E
Allendale C: Wabash, Lawrence . . .	1-2N; 11-13W	Boyd: Jefferson . . .	1S; 1-2E
Alma: Marion . . .	4N; 2E	Broughton: Hamilton . . .	6S; 7E
Amity: Richland . . .	4N; 14W	Broughton S: Saline . . .	7S; 7E
Amity S: Richland . . .	4N; 14W	Brown: Marion . . .	1N; 1E
Amity W: Richland . . .	4N; 14W	Browns: Edwards, Wabash . . .	1-2S; 14W
Ashley: Washington . . .	2S; 1W	Browns E: Wabash . . .	1-2S; 14W
Ashmore E: Coles . . .	13N; 14W	Browns S: Edwards . . .	2S; 14W
Assumption C: Christian . . .	13-14N; 1E	Bungay C: Hamilton . . .	4S; 7E
Assumption S: Christian . . .	12N; 1E	Burnt Prairie S: White . . .	4S; 9E
Ava-Campbell Hill: Jackson . . .	7S; 4W	Calhoun Central: Richland . . .	2N; 10E
Ayers Gas: Bond . . .	6N; 3W	Calhoun C: Richland, Wayne . . .	2-3N; 9-10E
Baldwin: Randolph . . .	4S; 6W	Calhoun E: Richland . . .	2N; 10-11E
Barnhill: Wayne . . .	2-3S; 8E	Calhoun N: Richland . . .	3N; 10E
Bartelso: Clinton . . .	1-2N; 3W	Calhoun S: Wayne . . .	2N; 9E
Bartelso E: Clinton . . .	1N; 3W	Carlinville: Macoupin . . .	9N; 7W
Bartelso S: Clinton . . .	1N; 3W	Carlinville N: Macoupin . . .	10N; 7W
Bartelso W: Clinton . . .	1N; 3-4W	Carlyle: Clinton . . .	2N; 3W
Beaucoup: Washington . . .	2S; 2W	Carlyle N: Clinton . . .	3N; 3W
Beaucoup S: Washington . . .	2S; 2W	Carlyle S: Clinton . . .	1N; 3W
Beaver Creek: Bond, Clinton . . .	3-4N; 2-3W	Carmi: White . . .	5S; 9E
Beaver Creek N: Bond . . .	4N; 3W	Carmi N: White . . .	5S; 9E
Beaver Creek S: Clinton, Bond . . .	3-4N; 2-3W	Casey: Clark . . .	10-11N; 14W
Beckemeyer Gas: Clinton . . .	2N; 3W	Centerville: White . . .	4S; 9E
Bellair: Crawford, Jasper . . .	8N; 14W	Centerville E: White . . .	3-4S; 9-10E
Belle Prairie: Hamilton . . .	4S; 6-7E	Centerville N: White . . .	3S; 10E
Belle Rive: Jefferson . . .	3S; 4E	Centerville NE: White . . .	3S; 10E
Bellmont: Wabash . . .	1S; 13-14W	Centralia: Clinton, Marion . . .	1-2N; 1E, 1W
Beman: Lawrence . . .	3N; 11W	Centralia W: Clinton . . .	1N; 1W
Beman E: Lawrence . . .	3N; 10W	Chesterville: Douglas . . .	15N; 7E
Bennington S: Edwards . . .	1N; 10E	Chesterville E: Douglas . . .	14-15N; 7-8E
Benton: Franklin . . .	6S; 2-3E	Christopher C: Franklin . . .	6S; 1E
Benton N: Franklin . . .	5-6S; 2E	Claremont: Richland . . .	3N; 14W
Berryville C: Wabash, Edwards . . .	1-2N; 14W	Clarksburg: Shelby . . .	10N; 4E
Bessie: Franklin . . .	6S; 3E	Clay City C: Clay, Wayne, Richland, Jasper . . .	1-7N, 1-2S; 6-10E
Beverly: Adams . . .	3S; 5W	Clay City W: Clay . . .	2N; 7E
Bible Grove N: Effingham . . .	6N; 7E	Clifford: Williamson . . .	8S; 1E
Bible Grove S: Clay . . .	5N; 7E	Coil: Wayne . . .	1S; 5E
Blackland: Macon, Christian . . .	15N; 1E-1W	Coil W: Jefferson . . .	1S; 4E
Black River: White . . .	4S; 13W	Collinsville: Madison . . .	3N; 8W
Blairsville W: Hamilton . . .	4S; 7E	Colmar-Plymouth: Han- cock, McDonough . . .	4N; 4-5W

* Includes abandoned pools.

TABLE 9.—(Continued)

Pool: County	Twp.—Range	Pool: County	Twp.—Range
Concord C: White . . .	6S; 10E	Exchange: Marion . . .	1N; 3E
Concord E C: White . . .	6-7S; 10E	Exchange E: Marion . . .	1N; 4E
Cooks Mills C: Coles, Douglas . . .	13-14N; 7-8E	Exchange N: Marion . . .	1N; 3-4E
Cordes: Washington . . .	3S; 3W	Exchange W: Marion . . .	1N; 3E
Corinth: Williamson . . .	8S; 4E	Fairman: Marion, Clinton . . .	3N; 1E, 1W
Corinth E: Williamson . . .	8S; 4E	Fishhook: Pike, Adams . . .	3-4S; 4-5W
Corinth S: Williamson . . .	8S; 4E	Fitzgerrell: Jefferson . . .	4S; 1E
Cottage Grove: Saline . . .	9S; 7E	Flora S: Clay . . .	2N; 6E
Covington S: Wayne . . .	2S; 6E	Francis Mills: Saline . . .	7S; 7E
Craig: Perry . . .	4S; 4W	Francis Mills S: Saline . . .	7S; 7E
Cravat: Jefferson . . .	1S; 1E	Freeburg S: St. Clair . . .	1S; 7W
Cravat W: Jefferson . . .	1S; 1E	Friendsville Central: Wabash . . .	1N; 13W
Crossville: White . . .	4S; 10E	Friendsville N: Wabash . . .	1N; 12-13W
Crossville W: White . . .	4S; 10E	Frogtown: Clinton . . .	2N; 3-4W
Dahlgren: Hamilton . . .	3S; 5E	Frogtown N: Clinton . . .	2-3N; 3-4W
Dale C: Hamilton, Saline, Franklin . . .	5-7S; 4-7E	Gards Point C: Wabash . . .	1N; 14W
Decatur: Macon . . .	16N; 2E	Gays: Moultrie . . .	12N; 6E
Decatur N: Macon . . .	17N; 3E	Germantown E: Clinton . . .	1-2N; 4W
Deering City: Franklin . . .	7S; 3E	Gila: Jasper . . .	8N; 9E
Divide: Jefferson . . .	1S; 3-4E	Gillespie-Wyen: Macoupin . . .	8N; 6W
Divide E: Jefferson . . .	1S; 4E	Gillespie-Benld Gas: Macoupin . . .	8N; 6W
Divide S: Jefferson . . .	2S; 3E	Glenarm: Sangamon . . .	14N; 5W
Divide W: Jefferson . . .	1S; 3E	Goldengate C: Wayne, White . . .	2-4S; 9E
Dix S: Jefferson . . .	1S; 2E	Goldengate E: Wayne . . .	3S; 9E
Dubois C: Washington . . .	3S; 1-2W	Goldengate N C: Wayne . . .	1-2S; 8-9E
Dubois Central: Washing- ton . . .	3S; 1W	Grandview: Edgar . . .	12-13N; 13W
Dudley: Edgar . . .	13-14N; 13W	Grayson: Saline . . .	8S; 7E
Dudley W Gas: Edgar . . .	13N; 13W	Greenville Gas: Bond . . .	5N; 3W
Dudleyville E: Bond . . .	4-5N; 2-3W	Half Moon: Wayne . . .	1S; 9E
Dundas E: Richland, Jas- per . . .	4-5N; 10E	Harco: Saline . . .	8S; 5E
Dupo: St. Clair . . .	1S, 1N; 10W	Harco E: Saline . . .	8S; 5E
Eberle: Effingham . . .	6N; 6E	Harrisburg: Saline . . .	8S; 6E
Edinburg: Christian . . .	14N; 3W	Harrisburg S: Saline . . .	9S; 6E
Edinburg S: Christian . . .	14N; 3W	Harristown: Macon . . .	16N; 1E
Edinburg W: Christian, Sangamon . . .	14N; 3-4W	Herald C: White, Gallatin . . .	6-8S; 9-10E
Elba: Gallatin . . .	8S; 8E	Hidalgo: Jasper . . .	8N; 10E
Elbridge: Edgar . . .	12-13N; 11W	Hidalgo N: Cumberland . . .	9N; 9E
Eldorado C: Saline . . .	8S; 6-7E	Hill: Effingham . . .	6N; 6E
Eldorado E: Saline . . .	8S; 7E	Hill E: Effingham . . .	6N; 6E
Eldorado W: Saline . . .	8S; 6E	Hoffman: Clinton . . .	1N; 2W
Elk Prairie: Jefferson . . .	4S; 2E	Hoodville E: Hamilton . . .	5S; 7E
Elkton: Washington . . .	2S; 4W	Hord: Clay . . .	5N; 6E
Elkville: Jackson . . .	7S; 1W	Hord S: Clay . . .	5N; 6E
Ellery C: Edwards, Wayne . . .	2S; 9-10E	Hornsby S: Macoupin . . .	8N; 6W
Ellery E: Edwards . . .	2S; 10E	Hoyleton W: Washington . . .	1S; 2W
Ellery N: Edwards . . .	2S; 10E	Huey: Clinton . . .	2N; 2W
Ellery S: Edwards . . .	2-3S; 10E	Huey S: Clinton . . .	1-2N; 2-3W
Elliotstown: Effingham . . .	7N; 7E	Hunt City: Jasper . . .	7N; 10E
Elliotstown E: Effingham . . .	7N; 7E	Hunt City E: Jasper . . .	7N; 14W
Elliotstown N: Effingham . . .	7N; 7E	Hunt City S: Jasper . . .	7N; 11E
Enfield: White . . .	5S; 8E	Ina: Jefferson . . .	4S; 2-3E
Evers: Effingham . . .	8N; 7E	Ina North: Jefferson . . .	4S; 3E
Evers S: Effingham . . .	7N; 7E	Inclose: Edgar, Clark . . .	12N; 13-14W
Ewing: Franklin . . .	5S; 3E	Ingraham: Clay . . .	4N; 8E
Ewing E: Franklin . . .	5S; 3E	Inman E C: Gallatin . . .	7-8S; 10E

TABLE 9.—(Continued)

Pool: County	Twp.—Range	Pool: County	Twp.—Range
Inman W C: Gallatin . . .	7-8S; 9-10E	Long Branch S: Saline . . .	8S; 6E
Iola Central: Clay . . .	5N; 5E	Louden: Fayette, Effingham	6-9N; 2-4E
Iola C: Clay, Effingham . .	5-6N; 5-6E	Louisville N: Clay . . .	4N; 6E
Iola S: Clay . . .	4N; 5E	Lynchburg: Jefferson . . .	3S; 4E
Iola W: Clay . . .	5N; 5E		
Irvington: Washington . .	1S; 1W	McKinley: Washington . .	3S; 4W
Irvington E: Jefferson . .	1S; 1E	Main C: Crawford . . .	5-8N; 10-14W
Irvington N: Washington .	1N, 1S; 1W	Maple Grove C: Edwards,	
Iuka: Marion . . .	2N; 4E	Wayne . . .	1N; 9-10E
Iuka W: Marion . . .	2N; 3E	Maple Grove S: Edwards .	1N; 10E
		Marcoc: Jefferson . . .	3S; 2E
Jacksonville Gas: Morgan .	15N; 9W	Marine: Madison . . .	4N; 6W
Johnson N: Clark . . .	9-10N; 14W	Marion: Williamson . . .	9S; 3E
Johnson S: Clark . . .	9N; 14W	Markham City: Jefferson .	2-3S; 4E
Johnsonville C: Wayne . .	1N, 1S; 6-7E	Markham City N: Jefferson,	
Johnsonville N: Wayne . .	1N; 6E	Wayne . . .	2S; 4-5E
Johnsonville S: Wayne . .	1S; 6E	Markham City W: Jefferson	2-3S; 4E
Johnsonville W: Wayne . .	1N, 1S; 5-6E		
Junction: Gallatin . . .	9S; 9E	Martinsville: Clark . . .	9-10N; 13-14W
Junction City: Marion . .	2N; 1E	Mason N: Effingham . . .	6N; 5E
Junction City S: Marion . .	2N; 1E	Massilon: Wayne, Edwards	1S; 9-10E
		Massilon S: Edwards . . .	1S; 10E
Junction E: Gallatin . . .	8-9S; 9E	Mattoon: Coles . . .	11-12N; 7-8E
Junction N: Gallatin . . .	8-9S; 9E	Maunie E: White . . .	6S; 11E
Keensburg E: Wabash . . .	2S; 13W	Maunie N C: White . . .	5-6S; 10-11E, 14W
Keensburg S: Wabash . . .	2-3S; 13W	Maunie S C: White . . .	6S; 10-11E
Keenville: Wayne . . .	1S; 5E	Mayberry: Wayne . . .	2-3S; 6E
Keenville E: Wayne . . .	1S; 5E	Mayberry N: Wayne . . .	2S; 6E
Kell: Jefferson . . .	1S; 3E		
Kenner: Clay . . .	3N; 5-6E	Melrose: Clark . . .	9N; 13W
Kenner N: Clay . . .	3N; 6E	Melrose S: Clark . . .	9N; 13W
Kenner W: Clay . . .	3N; 5E	Miletus: Marion . . .	4N; 4E
		Mill Shoals: White, Ham-	
Kenner S: Clay . . .	2N; 5E	ilton, Wayne . . .	2-4S; 7-8E
Keyesport: Clinton . . .	3N; 2W	Mills Prairie: Edwards . .	1N; 14W
King: Jefferson . . .	3-4S; 3E	Mills Prairie N: Edwards .	1N; 14W
Kincaid: Christian . . .	13N; 3W	Mitchellsville: Saline . .	10S; 6E
Kincaid S: Christian . . .	13N; 3W	Mt. Auburn C: Christian . .	15N; 1-2W
Kinmundy: Marion . . .	4N; 3E	Mt. Carmel: Wabash . . .	1N, 1S; 12W
Kinmundy N: Marion . . .	4N; 3E	Mt. Erie N: Wayne . . .	1N; 9E
Laclede: Fayette . . .	5N; 4E		
Lakewood: Shelby . . .	10N; 2-3E	Mt. Olive: Montgomery . .	8N; 5W
Lancaster: Wabash, Law-		Mt. Vernon: Jefferson . .	3S; 3E
rence . . .	1-2N; 13W	Mt. Vernon N: Jefferson .	2S; 3E
		Murdock: Douglas . . .	16N; 10E
Lancaster Central: Wabash	1N; 13W	Nason: Jefferson . . .	3S; 2E
Lancaster E: Wabash . . .	2N; 13W	New Bellair: Crawford . .	8N; 13W
Lancaster S: Wabash . . .	1N; 13W	New City: Sangamon . . .	14N; 4W
Langewisch-Kuester: Marion	1N; 1E	New Harmony C: White,	
Lawrence: Lawrence, Craw-		Wabash, Edwards . . .	1N, 1-5S; 13-14W
ford . . .	2-5N; 11-13W	New Harmony S: White . .	5S; 14W
Lawrence W: Lawrence . .	3N; 13W	New Harmony S (Ind.):	
Lexington: Wabash . . .	1S; 14W	White . . .	5S; 14W
Lexington N: Wabash . . .	1S; 14W		
Lillyville: Cumberland,		New Haven C: White . . .	7S; 10-11E
Effingham . . .	8-9N; 6-7E	New Hebron E: Crawford .	6N; 12W
Litchfield: Montgomery . .	8-9N; 5W	New Memphis: Clinton . .	1N, 1S; 5W
		New Memphis E: Wash-	
Livingston: Madison . . .	6N; 6W	ington . . .	1S; 4W
Livingston E Gas: Madison .	6N; 6W	New Memphis N: Clinton .	1N, 1S; 5W
Livingston S: Madison . . .	5-6N; 6W	New Memphis S: Clinton,	
Locust Grove: Wayne . . .	1N; 9E	Washington . . .	1S; 5W
Locust Grove S: Wayne . .	1S; 9E	Newton: Jasper . . .	6N; 9E
Long Branch: Saline,		Newton N: Jasper . . .	7N; 10E
Hamilton . . .	7S; 6E		

TABLE 9.—(Continued)

Pool: County	Twp.—Range	Pool: County	Twp.—Range
Newton W: Jasper . . .	6-7N; 9E	Richview: Washington . . .	2S; 1W
Noble W: Clay . . .	3N; 8E	Ridgway: Gallatin . . .	8S; 8E
Oakdale: Jefferson . . .	2S; 4E	Rifle: Clay . . .	4N; 6E
Oakley: Macon . . .	16N; 3E	Rinard: Wayne . . .	2N; 7E
Oak Point: Clark, Jasper . . .	8-9N; 14W	Rinard N: Wayne . . .	2N; 7E
Oak Point W: Clark . . .	9N; 14W	Ritter: Richland . . .	3N; 10-11E
Odin: Marion . . .	2N; 1-2E	Ritter N: Richland . . .	3N; 11E
Okawville: Washington . . .	1S; 4W	Roaches: Jefferson . . .	2S; 1E
Okawville N: Washington . . .	1S; 4W	Roaches N: Jefferson . . .	2S; 1E
Old Ripley: Bond . . .	5N; 4W	Roby: Sangamon . . .	15N; 3W
Olney C: Richland . . .	4N; 10E	Roby W: Sangamon . . .	15N; 3W
Olney S: Richland . . .	3N; 10E	Rochester: Wabash . . .	2S; 13W
Omaha: Gallatin . . .	7-8S; 8E	Roland C: White, Gallatin . . .	5-7S; 8-9E
Omaha E: Gallatin . . .	8S; 8E	Roland W: Saline . . .	7S; 7E
Omaha S: Gallatin, Saline . . .	8S; 7-8E	Ruark: Lawrence . . .	2N; 12W
Omaha W: Saline . . .	7-8S; 7E	Ruark W C: Lawrence . . .	2N; 13W
Omega: Marion . . .	3N; 4E	Rural Hill N: Hamilton . . .	5S; 5E
Orchardville: Wayne . . .	1N; 5E	Russellville Gas: Lawrence . . .	4-5N; 10-11W
Orchardville N: Wayne . . .	1N; 5E	Russellville W: Lawrence . . .	5N; 11W
Oskaloosa: Clay . . .	3-4N; 5E	St. Francisville: Lawrence . . .	2N; 11W
Oskaloosa E: Clay . . .	3N; 5-6E	St. Francisville E: Lawrence . . .	2N; 11W
Oskaloosa S: Clay . . .	3N; 5E	St. Jacob: Madison . . .	3N; 6W
Pana: Christian . . .	11-12N; 1E	St. Jacob E: Madison . . .	3N; 6W
Panama: Bond, Montgomery . . .	7N; 3-4W	St. James: Fayette . . .	5-6N; 2-3E
Pankeyville: Saline . . .	9S; 6E	St. Paul: Fayette . . .	5N; 3E
Pankeyville E: Saline . . .	9S; 7E	Ste. Marie: Jasper . . .	5N; 11E-14W
Parkersburg C: Richland, Edwards . . .	1-3N; 10-11E, 14W	Ste. Marie E: Jasper . . .	6N; 14W
Parkersburg S: Edwards . . .	1N; 14W	Ste. Marie W: Jasper . . .	5-6N; 10E
Parkersburg W: Richland, Edwards . . .	2N; 10E	Sailor Springs Central: Clay . . .	4N; 7-8E
Passport: Clay . . .	4-5N; 8E	Sailor Springs C: Clay, Effingham . . .	3-6N; 6-8E
Passport S: Richland, Clay . . .	4N; 8-9E	Sailor Springs E: Clay . . .	4N; 8E
Passport W: Clay . . .	4N; 8E	Sailor Springs N: Clay . . .	4N; 8E
Patoka: Marion . . .	3-4N; 1E, 1W	Salem C: Marion, Jefferson . . .	1-2N, 1S; 1-2E
Patoka E: Marion . . .	4N; 1E	Samsville: Edwards . . .	1N; 11E
Patoka S: Marion . . .	3N; 1E	Samsville N: Edwards . . .	1N; 14W
Patoka W: Fayette . . .	4N; 1W	Samsville NW: Edwards . . .	1N; 10E
Phillipstown C: White, Edwards . . .	3-5S; 10-11E, 14W	Samsville W: Edwards . . .	1N; 10E
Phillipstown S: White . . .	5S; 10E	Sandoval: Marion . . .	2N; 1E
Pinkstaff: Lawrence . . .	4N; 11W	Sandoval W: Clinton . . .	2N; 1W
Pinkstaff E: Lawrence . . .	4N; 11W	Santa Fe: Clinton . . .	1N; 3W
Pittsfield Gas: Pike . . .	5S; 4-5W	Schnell: Richland . . .	2N; 9E
Plainview: Macoupin . . .	9N; 8W	Schnell E: Richland . . .	2N; 9E
Posen: Washington . . .	3S; 2W	Schnell S: Clay . . .	2N; 8E
Posen N: Washington . . .	3S; 2W	Seminary: Richland . . .	2N; 10E
Posen S: Washington . . .	3S; 2W	Sesser: Franklin . . .	5-6S; 1-2E
Posey: Clinton . . .	1N; 2W	Shattuc: Clinton . . .	2N; 1W
Posey E: Clinton . . .	1N; 2W	Shawneetown: Gallatin . . .	9S; 9E
Posey W: Clinton . . .	1N; 3W	Shawneetown E: Gallatin . . .	9S; 10E
Prentice: Morgan . . .	16N; 8W	Shawneetown N: Gallatin . . .	9S; 10E
Raccoon Lake: Marion . . .	1N; 1E	Shelbyville C: Shelby . . .	11N; 4E
Raleigh: Saline . . .	7-8S; 6E	Sicily: Christian . . .	13N; 4W
Raleigh S: Saline . . .	8S; 6E	Siggins: Cumberland, Clark . . .	10-11N; 10-11E, 14W
Raymond: Montgomery . . .	10N; 4-5W	Sorento C: Bond . . .	6N; 4W
Raymond E: Montgomery . . .	10N; 4W	Sorento W: Bond . . .	6N; 4W
Redmon N: Edgar . . .	14N; 13W	Spanish Needle Creek Gas: Macoupin . . .	9N; 7W
Reservoir: Jefferson . . .	1S; 3E	Sparta Gas: Randolph . . .	4-5S; 5-6W

TABLE 9.—(Continued)

Pool: County	Twp.—Range	Pool: County	Twp.—Range
Sparta S: Randolph . . .	5S; 5W	Waggoner: Montgomery . .	11N; 5W
Stanford S: Clay, Wayne .	2N; 7E	Wakefield: Jasper . . .	5N; 9E
Staunton: Macoupin . . .	7N; 7W	Wakefield N: Jasper . . .	5N; 9E
Staunton Gas: Macoupin . .	7N; 7W	Wakefield S: Richland . .	5N; 9E
Staunton W: Macoupin . . .	7N; 7W	Walpole: Hamilton . . .	6-7S; 6E
Stewardson: Shelby . . .	10N; 5E	Walpole S: Hamilton . . .	7S; 6E
Storms C: White . . .	5-6S; 9-10E	Waltonville: Jefferson . .	3S; 2E
Stringtown: Richland . . .	4-5N; 11E-14W	Wamac: Clinton, Marion,	
Stringtown E: Richland . .	4N; 14W	Washington	1N; 1E, 1W
Stubblefield S: Bond . . .	4N; 3W		
Sumner: Lawrence . . .	4N; 13W	Wamac E: Marion	1N; 1E
Sumpter: White . . .	4S; 9E	Warrenton-Borton: Edgar,	
Sumpter E: White . . .	4-5S; 10E	Coles	13-14N; 13-14W
Sumpter N: White . . .	4S; 9E	Waterloo: Monroe	1-2S; 10W
Sumpter S: White . . .	4-5S; 9E	Waverly Gas: Morgan . . .	13N; 8W
Sumpter W: White . . .	4S; 9E	Weaver: Clark	11N; 10W
Tamaroa: Perry . . .	4S; 1W	West Frankfort C: Franklin	7S; 2-3E
Tamaroa S: Perry . . .	4S; 1W	Westfield: Clark, Coles . .	11-12N; 11E-14W
Tamaroa W: Perry . . .	4S; 2W	Westfield E: Clark	11-12N; 14W
Taylor Hill: Franklin . . .	5S; 4E	Westfield N: Coles	12N; 14W
Thackeray: Hamilton . . .	5S; 7E	Whittington: Franklin . .	5S; 3E
Thompsonville: Franklin . .	7S; 4E	Whittington S: Franklin . .	5-6S; 3E
Thompsonville E: Franklin .	7S; 4E	Whittington W: Franklin . .	5S; 2E
Thompsonville N: Franklin .	7S; 4E	Williams C: Jefferson . . .	3S; 2E
Tilden: Randolph . . .	4S; 5W	Willow Hill E: Jasper . . .	6-7N; 10-11E
Toliver E: Clay . . .	5N; 6-7E	Woburn C: Bond	6-7N; 2W
Toliver S: Clay . . .	4N; 5-6E	Woodlawn: Jefferson . . .	2-3S; 1-2E
Tonti: Marion . . .	2-3N; 2E	Xenia: Clay	2N; 5E
Tovey: Christian . . .	13N; 3W	Xenia E: Clay	2N; 5E
Trumbull: White . . .	5S; 8-9E	York: Cumberland, Clark .	9-10N; 10-11E, 14W
Trumbull W: White . . .	5S; 8E	Zenith: Wayne	2N; 5E
Valier: Franklin . . .	6S; 2E	Zenith N: Wayne	2N; 6E
		Zenith S: Wayne	1N; 5E

TABLE 10.—POOLS INCORPORATED INTO OTHER POOLS
BY CONSOLIDATION
C = Consolidated

Original pool name; first consolidation	Present pool assignment	Date of first con- sol.	Original pool name; first consolidation	Present pool assignment	Date of first con- sol.
Aden N	Aden C	1944	Boos; Dundas C	Clay City C	1941
Albion N	Albion C	1944	Boos E; Willow Hill C . . .	Clay City C	1947
Allison-Weger	Main C	1955	Boos N	Clay City C	1948
Assumption N	Assumption C	1953	Boyleston C	Clay City C	1948
Barnhill E	Goldengate C	1944	Brownsville; Stokes-Browns- ville	Roland C	1946
Bend	New Harmony C	1952	Burnt Prairie; Leech Twp. .	Goldengate C	1947
Bennington	Maple Grove C	1952			
Bible Grove C	Sailor Springs C	1949	Calvin	New Harmony C and Phillipstown C	1941
Bible Grove E; Bible Grove C	Sailor Springs C	1948	Calvin N	Phillipstown C	1948
Birds	Main C	1955	Cantrell C	Dale C	1955
Blairsville	Bungay C	1951	Cantrell N	Dale C	1956
Bone Gap S	Bone Gap C	1952	Cantrell S; Cantrell C . . .	Dale C	1953
Bonpas	Parkersburg C	1951	Chapman	Main C	1954
Bonpas W	Parkersburg C	1944	Cisne	Clay City C	1948

TABLE 10.—(Continued)

Original pool name; first consolidation	Present pool assignment	Date of first con- sol.	Original pool name; first consolidation	Present pool assignment	Date of first con- sol.
Cisne N	Clay City C	1954	Lancaster N	Ruark W C	1952
Clay City N	Clay City C	1954	Lancaster W	Berryville C	1949
Concord Central; Concord S C	Herald C	1952	Leech C	Goldengate C	1948
Concord N	Concord C	1955	Maple Grove E	Parkersburg C	1952
Concord S C	Herald C	1955	Mason	Iola C	1956
Cooks Mills E	Cooks Mills C	1956	Mason S	Iola C	1948
Cooks Mills Gas	Cooks Mills C	1955	Maud Central; Maud N C	New Harmony C	1949
Cooks Mills N	Cooks Mills C	1955	Maud C	New Harmony C	1951
Cottonwood	Herald C	1953	Maud N C	New Harmony C	1951
Cottonwood N	Herald C	1953	Maud W; Maud N C	New Harmony C	1948
Covington; Boyleston C	Clay City C	1944	Maunie	Maunie S C	1948
Covington E	Clay City C	1948	Maunie W	Maunie N C	1955
Cowling	New Harmony C	1947	Merriam	Clay City C	1953
Dead River	New Haven C	1950	Mitchell	Ellery C	1952
Dix	Salem C	1954	Mt. Auburn Central	Mt. Auburn C	1954
Dubois W	Dubois C	1955	Mt. Auburn E	Mt. Auburn C	1954
Dundas C	Clay City C	1948	Mt. Carmel W	New Harmony C	1948
Eldorado Central	Eldorado C	1954	Mt. Erie	Clay City C	1944
Eldorado N	Eldorado C	1955	Mt. Erie S	Clay City C	1948
Ellery W	Ellery C	1952	New Haven N	Concord E C	1950
Enterprise	Clay City C	1941	New Haven W	Inman E C	1949
Enterprise W	Clay City C	1941	New Hebron	Main C	1955
Epworth C	Storms C	1957	Noble	Clay City C	1948
Epworth E; Epworth C	Storms C	1951	Noble N	Clay City C	1948
Fairfield	Clay City C	1953	Noble S	Clay City C	1948
Fairfield E	Clay City C	1953	Norris City	Roland C	1955
Flannigan	Dale C	1955	North City	Christopher C	1954
Flat Rock	Main C	1954	Olney E	Olney C	1949
Flora	Sailor Springs C	1955	Parker	Main C	1954
Friendsville	New Harmony C	1949	Parkersburg N	Parkersburg C	1951
Friendsville S	New Harmony C	1949	Patton	Allendale C	1948
Gallagher	Calhoun C	1946	Patton W	Allendale C	1948
Gards Point N	Gards Point C	1957	Roundprairie	Johnsonville C	1941
Geff	Clay City C	1947	Rural Hill	Dale C	1951
Geff W	Clay City C	1948	Rural Hill W	Dale C	1955
Goldengate W	Goldengate N C	1953	Sailor Springs S	Sailor Springs C	1942
Gossett	Roland C	1954	Sailor Springs W	Sailor Springs C	1949
Grayville	Phillipstown C	1948	Shelbyville E	Shelbyville C	1956
Grayville W	Albion C	1949	Sims	Johnsonville C	1948
Griffin	New Harmony C	1941	Sims N	Johnsonville C	1945
Helena	Ruark W C	1952	Springerton	Bungay C	1946
Herald E; Concord S C	Herald C	1953	Stanford	Clay City C and Sailor Springs C	1953
Herald N	Storms C	1953	Stanford W	Sailor Springs C	1953
Hoodville	Dale C	1943	Stokes-Brownsville; Iron C	Roland C	1953
Hoosier; Bible Grove C	Sailor Springs C	1948	Swearingen Gas	Main C	1955
Hoosier N; Bible Grove C	Sailor Springs C	1948	Toliver	Hord S	1955
Ingraham W; Bible Grove C	Sailor Springs C	1948	West End	Dale C	1955
Inman	Inman W C	1950	West Frankfort S	West Frankfort C	1948
Inman Central	Inman W C	1949	West Liberty; Dundas C	Clay City C	1941
Inman N	Inman W C	1949	Williams S	Williams C	1953
Inman S	Inman W C	1950	Willow Hill C	Clay City C	1948
Iron C	Roland C	1954	Willow Hill N; Willow Hill C	Clay City C	1947
Keensburg C	New Harmony C	1948	Woburn S	Woburn C	1950

COUNTY REPORTS

TABULATED PRODUCTION FOR 1957

County	M bbls.	County	M bbls.	County	M bbls.
Adams	0*	Hamilton	3,265	Randolph	183
Bond	884	Hancock-McDonough	65	Richland	2,250
Christian	1,757	Jackson	0‡	St. Clair	10
Clark-Cumberland	1,740	Jasper	1,153	Saline	1,273
Clay	4,512	Jefferson	2,839	Sangamon	20
Clinton	4,003	Lawrence	4,672	Shelby	35
Coles	1,011	Macon	82	Wabash	3,135
Crawford	2,964	Macoupin	1	Washington	899
Douglas	819	Madison	335	Wayne	5,351
Edgar	100	Marion	6,546	White	7,819
Edwards	1,752	Montgomery	3	Williamson	63
Effingham	525	Morgan	0‡		
Fayette	12,113	Moultrie	8		
Franklin	1,724	Perry	32	TOTAL	76,649
Gallatin	2,708	Pike	0*		

*Only gas.

‡All wells abandoned or temporarily shut down.

ADAMS COUNTY

Thirteen wells were drilled for oil or gas in Adams County in 1957, almost one-third of all the tests which have been made in that county. No oil has been discovered, but three gas wells were completed in 1957, two in the Beverly Gas pool (a 1957 discovery), and the third in the Fishhook pool, most of which is in Pike County. The three wells had a total initial open flow capacity of about a million cubic feet. All are shut in. The Fishhook pool may be used for gas storage, but no plan of utilization has been announced for the Beverly pool.

The 10 dry holes included 2 in pools and 8 wildcats. Most of the tests were in Silurian strata, their depths averaging about 650 feet.

BOND COUNTY

Bond is one of the counties in which drilling decreased most in 1957. Well completions dropped from 126 in 1956 to 65 in 1957, and successful wells dropped considerably further, from 42 in 1956 to 16 in 1957.

The one new oil pool, New Douglas South, consisted of a single Pennsylvanian sand well which had not had any pipe line runs by the end of the year. Other producing wells drilled in 1957 were 8 Pennsylvanian sand wells in Old Ripley

pool, 3 Pennsylvanian and 4 Devonian wells in Sorento Consolidated, and 1 Aux Vases in Woburn Consolidated. The figures include 1 dry hole reworked to a producer in addition to the 16 newly drilled producers.

Dry holes included 28 in pools, 13 wildcats within two miles of production (wildcats near), and 8 wildcats more than two miles from production (wildcats far).

Crude oil production in 1957 in Bond County was almost entirely confined to three pools: Sorento Consolidated with 488,000 barrels, Woburn Consolidated with 349,000 barrels, and Old Ripley with 41,000. Total production for the county for the year was 884,000 barrels of oil. Secondary recovery operations have been tried in Bond County but have not been very successful.

CHRISTIAN COUNTY

Christian County appears to have had an increase in drilling from 84 completions in 1956 to 111 in 1957. However, many of the 1957 completions are in the Kincaid area and were actually running oil in 1956 but were not reported as completed until 1957 because data on them were not available earlier. The number of wells actually completed in 1957 was slightly less than in 1956.

The 111 wells reported completed in 1957 include 59 oil wells, 22 pool dry holes,

8 wildcats less than two miles from production, and 22 wildcats more than two miles from production. All of the producing wells were in Silurian or Devonian limes and sands, 38 in the Kincaid and Kincaid South pools, 2 in Sicily, 5 in Blackland, and 15 in Mt. Auburn Consolidated (includes 1 well worked over from a dry hole to a producer).

Crude oil production for the county for 1957 was 1,758,000 barrels. More than three-quarters of the oil came from Kincaid, Kincaid South, and Assumption Consolidated. Most of the remaining quarter came from Mt. Auburn Consolidated and Edinburg West. Other pools produced only minor amounts.

Secondary recovery by waterflooding has been successful in the Assumption Consolidated pool in all three pays. It has not yet been introduced in the other pools in the county.

CLARK-CUMBERLAND COUNTIES

Clark and Cumberland counties are in the older oil-producing area of the state. Many of the wells are drilled on secondary recovery projects in the old fields. Few such wells are reported through the Scouts Association. The following figures are low, and apply for the most part to the newer pool or undeveloped areas of the counties.

Clark County had 84 wells reported drilled in 1957. This includes 9 producing wells in new pools (4 in Melrose, 4 in Oak Point West, and 1 in Oak Point), and 36 producing wells in the old fields. There were 29 dry holes in pools (both old and new), and 10 wildcats.

The new pools in Clark County produced 132,000 barrels of oil in 1957, 100,000 barrels less than in 1956. About one-third of the oil is now coming from the Oak Point pool and two-thirds from the Weaver pool, with insignificant amounts from the remaining pools. Cumulative production for Clark County new pools is about 1,581,000 barrels, of which Weaver has produced 1,392,000 barrels.

Cumberland County had only 8 wells reported completed during 1957. One was

a producing well, 3 were pool dry holes, and 4 were wildcats.

Production from its two new pools (both discovered in 1946) was only 6,500 barrels, bringing its cumulative new pool production up to 262,000 barrels.

Old pool production for Clark and Cumberland counties for 1957 was 1,602,000 barrels of oil, most of it produced by waterflooding. Total old field production for Clark and Cumberland counties is 72,084,000 barrels.

During 1957 the two counties produced 1,740,000 barrels of oil.

CLAY COUNTY

Drilling in Clay County in 1957 held up better than in most of the counties which are normally most active. Total completions decreased from 124 in 1956 to 103 in 1957 as contrasted with 50 percent drops in some of the adjacent counties. The 103 completions included 46 producers, 39 dry holes in pools, 17 wildcats less than two miles from production and one wildcat beyond two miles from production.

Clay County oil pools, excluding Clay City Consolidated, produced 2,512,000 barrels in 1957. Production from the Clay City Consolidated pool, which extends into four counties, has not been broken up completely. The Clay County portion of its production is estimated at 2,000,000 barrels for 1957, making total production for the county about 4,512,000 barrels of oil.

CLINTON COUNTY

Clinton County had a poor drilling record, but a good production record for 1957. Eighty-three wells were completed, but of this number only about 27 percent were productive (19 oil and 3 gas). Dry holes included 10 in pools, 29 wildcats less than two miles from production and 22 wildcats more than two miles from production.

Production for Clinton County almost doubled in 1957. Most of the county's pools showed declines. Waterflooding of the Centralia pool, which extends into Marion County, increased in effectiveness in 1957. Production for the pool increased

from 593,000 barrels in 1956 to 2,544,000 barrels in 1957. Most of the increased production was from Chester sand wells in Clinton County. Production for the county is estimated at 4,003,000 barrels for 1957.

COLES COUNTY

Coles County had one of the biggest decreases in drilling, dropping from 266 completions in 1956 to 60 in 1957. However, Coles County normally has only a small amount of drilling and has had more than 60 wells in one year only twice before, in 1945 and 1946 when the Mattoon pool was being developed and in 1956.

In 1956 the Cooks Mills Consolidated pool was developed. In 1957, 18 Rosiclare oil wells and 2 Cypress gas wells were completed in that pool, and 1 Cypress, 1 Cypress-Rosiclare, and 8 Rosiclare oil wells in the Mattoon pool. There were 11 pool dry holes, 8 wildcats near, and 14 wildcats far.

Crude oil production also declined sharply from 1,636,000 barrels in 1956 to 1,011,000 in 1957, all of the oil coming from Mattoon and Cooks Mills Consolidated pools. Most of the decrease was in the Cooks Mills Consolidated pool, from 1,001,000 to 416,000 barrels.

Secondary recovery operations (waterflooding) began in the Mattoon pool in 1950 and were expanded in 1952. Production reached a low of 377,000 barrels in 1953. After flooding became effective, production rose to a peak of 635,000 barrels in 1956 and then dropped slightly to 595,000 barrels in 1957.

CRAWFORD COUNTY

Most of the present drilling in Crawford County is for developing new pays in the old fields or for improving spacing patterns in waterflood areas. In 1957, 158 wells were drilled, including 75 oil wells, 2 gas wells, 72 dry holes in pools, and 9 wildcats. Most of the wells were drilled within the geographic limits of the old Main Consolidated field.

Crawford County oil production for 1957 was about 2,964,000 barrels, due mainly to

secondary recovery. Cumulative production for Crawford County is 174,577,000 barrels of oil for Main Consolidated plus a few thousand for the new minor pools. Crawford County is among the half dozen counties in Illinois which have recovered the most oil, but several counties are currently outproducing it by far and should surpass it soon.

DOUGLAS COUNTY

The first oil well in Douglas County was completed in 1955, but no pipe line oil was run until 1956. In 1956, 248 wells were drilled; three new oil pools were discovered and the Cooks Mills Consolidated pool was extended into Douglas County. The 1956 drilling boom lasted until late summer of 1957. One new pool was discovered, Chesterville East, which had 40 Rosiclare oil wells at the end of the year. A total of 115 wells were drilled in Douglas County in 1957, most of them during the spring and summer. All of the producing wells (51 new wells and 3 workovers from former dry holes) were in the Chesterville East or Bourbon pools. Dry holes included 28 in pools, 20 wildcats less than two miles from production, and 16 wildcats more than two miles from production.

Crude oil production increased in Douglas County in 1957 because of Chesterville East. Total production for the year was 819,000 barrels, an increase of 95,000 barrels. Chesterville East produced 464,000 barrels, or more than one-half. Bourbon and Cooks Mills Consolidated both showed big drops in production, the former from 490,000 to 273,000 barrels, and the latter from 216,000 to 64,000 barrels. Production from the other pools in the county was negligible. All production in Douglas County is from the Rosiclare.

EDGAR COUNTY

In 1957, Edgar County drilling for oil and gas dropped over 50 percent from the previous year. Only 16 wells were completed. Inclose and Grandview each had one small Pennsylvanian sand well. The other 14 holes were dry, 2 of them pool dry holes and 12 wildcats.

Crude oil production for Edgar County for 1957 amounted to about 100,000 barrels. Elbridge and Dudley had a total of 97,000 barrels, with small amounts from the remaining pools. A little gas was produced and used in the town of Grandview, but it was not metered.

EDWARDS COUNTY

In 1957 well completions in Edwards County dropped to about one-half as many as in the previous year and reached the lowest level since 1939. Only 37 wells were drilled in 1957, 10 (or about 25 percent) of which were successful. In 1939 when only 34 wells were drilled, 17 (50 percent) were successful.

Edwards County is so densely drilled it is improbable that any new pools will be discovered. The 1957 drilling includes 10 oil wells, 14 dry holes in pools, and 13 wildcats less than two miles from production.

Crude oil production for Edwards County for 1957 is estimated at 1,752,000 barrels, an increase of about 220,000 barrels over 1956 production. All of the increased production should be attributed to successful flooding projects in the Albion Consolidated pool. All other pools in the county showed declines in production except Berryville Consolidated, which increased less than 1,500 barrels for the year. The Edwards County portion of Albion Consolidated produced 1,124,000 barrels of oil in 1957, an increase of about 275,000 barrels. Six new wells were drilled in the Albion Consolidated pool.

EFFINGHAM COUNTY

Drilling was about normal in Effingham County in 1957. Forty-two wells were completed, including 12 oil wells, 13 dry holes in pools, 8 wildcats near, and 9 wildcats far. One new pool was discovered, Watson, consisting of a single Rosiclare well which had not run any pipeline oil at the end of the year. Ten of the new oil wells were in the Iola Consolidated pool and one in Eberle pool.

There was only a minor decrease in production, from 558,000 barrels in 1956 to

525,000 barrels in 1957, and two of the three largest pools showed increases. Sailor Springs Consolidated and Iola Consolidated, both of which extend from Clay County into Effingham County, had increased production in 1957 in the Effingham County sector of the pool. Production for the two pools (Effingham County area only) was 231,000 barrels for Iola Consolidated and 104,000 barrels for Sailor Springs Consolidated. Hill East, largest pool entirely within the county, made 124,000 barrels of oil in 1957. Production from the small section of the Loudon pool which extends into Effingham County is insignificant.

FAYETTE COUNTY

Few counties produce as much oil in a year as the increase in Fayette County production amounted to in 1957. Production for the year was 12,113,000 barrels, an increase of almost 2,000,000 barrels. Most of the oil came from the Loudon pool. Waterflooding of the Loudon pool began in 1950; new projects have been added annually. Production reached its lowest level of 5,131,000 barrels in 1953, increasing to 11,770,000 barrels produced in 1957, representing an increase of 1,843,000 barrels over that of 1956. A small waterflood project was begun in the St. James pool in 1954 resulting in increased production for 1955 and 1956, but it dropped again in 1957 to 314,000 barrels. Production from other pools in the county was insignificant.

Although Fayette is one of the best oil-producing counties in Illinois, most of the drilling was done during two periods when the Loudon pool and its extension and the St. James pool were being drilled. In 1957, 23 wells were drilled, 8 of them oil wells in the Loudon, St. James, and St. Paul pools, 3 of them pool dry holes, 12 wildcats.

FRANKLIN COUNTY

Drilling and production both decreased in Franklin County in 1957 at about the same rate as in the whole state.

Sixty-three wells were completed, 31 as oil wells, 18 as pool dry holes, 11 as wild-

cats near production, and 3 as wildcats far. One new pool was discovered, Deering City, with 2 wells which had produced 13,000 barrels of oil by the end of the year. Twelve of the new oil wells were in the Sesser-Christopher Consolidated area, 8 in the Akin pool, and the others were scattered.

Production for Franklin County was 1,724,000 barrels in 1957, a loss of 351,000 barrels from the previous year. The Benton pool, which currently produces about 45 percent of Franklin County's oil, dropped to 772,000 barrels, a loss of 278,000 barrels.

Two pools showed major increases in production in 1957: Whittington West, as a result of 5 new oil wells, and Thompsonville North as a result of flooding.

GALLATIN COUNTY

Drilling in Gallatin County fell off about one-third, one of the biggest decreases among the counties during 1957. In a two-year period it dropped from 200 completions in 1955 to 81 in 1957. The 81 wells drilled in 1957 included 51 producers, 23 pool dry holes, and 7 wildcats. The biggest concentration of drilling was in the Inman West Consolidated pool with 31 producing wells. Herald Consolidated had 7 producers, Inman East Consolidated had 4 producers.

There was a small decline in production for the county from 3,057,000 barrels of oil in 1956 to 2,708,000 in 1957. All of the larger pools have approximately equivalent declines. Only one pool, Ab Lake, had a notable increase, from 24,000 barrels in 1956 to 51,000 barrels in 1957.

JACKSON COUNTY

Four wells were drilled for oil in Jackson County in 1957. All were completed as dry holes, 2 of them in pools and 2 as wildcats.

No production was reported for the county for 1957. The one-well Elkhaville pool has had no pipeline runs since 1951. In 1956 an oil well was completed in the abandoned Ava-Campbell Hill pool, but no pipeline runs have been reported.

JASPER COUNTY

Drilling in Jasper County dropped off more than 50 percent from 1956 to 1957. Only 56 wells were drilled in 1957. Twenty-nine of them were producers, 16 were dry holes in pools, 9 were wildcats less than two miles from production, and two were more distant wildcats. One new pool, Gila, was discovered. At the end of the year only one small well had been completed, but more wells were drilling than in any other 1957 new pool.

Almost all of the oil in Jasper County comes from the Clay City Consolidated pool. Smaller pools produced about 153,000 barrels of oil, most of them showing some decline in production. The Clay City Consolidated pool extends into four counties. The Jasper County portion of its production for 1957 is estimated at about one million barrels.

JEFFERSON COUNTY

Jefferson County showed little decrease in drilling in 1957, but increased its production, in contrast to the decrease for the state as a whole.

Eighty-nine wells were drilled during the year, including 36 oil wells, 33 dry holes in pools, and 20 wildcats.

Twelve pools in Jefferson County had big changes in production in 1957 as compared with that of 1956. Five of these were declines which ranged from 35,000 barrels in Irvington East to 105,000 barrels in the Jefferson County portion of the Salem Consolidated pool (approximately the former Dix pool). Intermediate declines were recorded in Williams Consolidated, King, and Boyd pools.

Increases, reported in seven pools, were a little smaller, ranging from 10,000 barrels in Divide East to 73,000 in Divide West. Secondary recovery has helped to maintain productive levels in some of the pools with increased production, but most of them have also had enough new wells drilled during the year to add substantially to production for the year. The Ina pool, discovered in 1938 and abandoned in 1946 after producing only 16,000 barrels of oil,

had 11 oil wells completed in 1957 which produced 45,000 barrels of oil in one year.

HAMILTON COUNTY

In 1957, Hamilton County tied with Crawford County for third place in the state in number of wells drilled. A total of 158 wells were drilled, only three less than in 1956, and almost half of the wells were successful. Seventy-one were completed as oil wells, 58 as pool dry holes, and 29 as unsuccessful wildcats.

Fifty-four of the 71 new oil wells were in the Dale Consolidated pool, most of them in the southwestern part of the pool. The other producers were scattered throughout the pools in the county, with no great concentration in any one area. Only a few of the 1957 wells produce from any pay other than the Aux Vases.

Production for 1957 was almost one million barrels below that for 1956, when production was high. The 1957 production for Hamilton County was 3,265,000 barrels of oil. Although the rate of drilling and percentage of success declined very little, production declined in all of the pools in the county.

HANCOCK AND McDONOUGH COUNTIES

Hancock and McDonough counties share one oil pool, Colmar-Plymouth, which has been producing since 1914. Every year a few wells are drilled in an unsuccessful effort to locate more Hoing sand oil pools. Two wells were completed in Hancock County in 1957, both as unsuccessful wildcats.

Production for the Colmar-Plymouth pool for 1957 was 65,000 barrels of oil.

LAWRENCE COUNTY

In 1957, 147 wells were drilled for oil or gas in Lawrence County. Of this number, 93 were completed as producers (5 in the new pools and 88 in the Lawrence and St. Francisville pools), 45 were pool dry holes, and 9 were wildcats. Most of the 1957 oil wells produce from Chester sands.

One of the biggest declines in production for 1957 was in the new pools in Law-

rence County. Most of the oil in the new fields comes from 4 pools, three of which (Ruark, Ruark West, Lawrence West) had declines of about 50 percent each; the fourth (St. Francisville East) increased by about 4,000 barrels. New pool production for 1957 was 174,000 barrels as compared with 313,000 barrels for 1956. The new pools in Lawrence County have produced 4,050,000 barrels of oil.

The old Lawrence and St. Francisville pools have produced more oil than any county except Marion but are currently being outproduced by several other counties. Old pool production in Lawrence County for 1957 was 4,498,000 barrels, much of it by waterflooding.

MACON COUNTY

Drilling increased slightly, but not significantly, in Macon County in 1957. Most of the northernmost oil-producing counties showed heavy declines for the year. There were 16 wells drilled in 1957 as compared with 13 in 1956. The 16 wells included 5 oil wells (2 in Harristown and 3 in Blackland), 5 dry holes in pools, 5 wildcats within two miles of production, and 1 wildcat more than two miles from production.

Oil production in 1957 was 82,000 barrels, an increase of 10,000 barrels. The biggest pool, Blackland, which extends into Christian County, produced 50,000 barrels in Macon County. Harristown pool, with 1,000 barrels in 1956, increased to 27,000 in 1957.

Five pools have been discovered in Macon County, all of them within the last five years. One of the five has been abandoned and two others probably will not pay out.

MACOUPIN COUNTY

Twelve wells were drilled in Macoupin County in 1957, resulting in 1 dry hole in a pool and 11 dry wildcats.

Although oil was discovered in Macoupin County almost 50 years ago, its pools are small and production unimportant. In 1957, pipeline runs amounted to only a few hundred barrels of oil.

MADISON COUNTY

Madison County probably has a poorer drilling record than any other county with a good production. The 1957 record is typical: 20 wells completed, including 1 producer (a small Pennsylvanian well in Livingston), 3 dry holes in pools, 6 wildcats near, and 12 wildcats far.

Production for 1957 was 335,000 barrels. Madison County is unique also in that it has three good producing areas, one of which is Pennsylvanian, one Silurian-Devonian, and one Trenton; Mississippian pays are lacking. The Marine pool (Silurian-Devonian) has produced and is currently producing about two-thirds of the county's oil. In 1957 it made 233,000 barrels. The remaining one-third is currently about evenly divided between St. Jacob (Trenton) and the Livingston-Livingston South pools (Pennsylvanian). However, St. Jacob has a cumulative production of almost 3,000,000 barrels and the two Pennsylvanian pools have produced only half a million barrels.

MARION COUNTY

Marion County is one of the few counties showing notable increases in drilling in 1957, and is the only county in which a new pool was discovered which was not marginal to the oil producing area of the state. Eighty-two wells were completed, 42 as oil wells, 24 as dry holes in pools, 10 as wildcats near and 6 as wildcats far.

Most of the new producing wells were concentrated in a small area. Twenty-four Trenton wells were drilled at the southwestern end of the Patoka pool, and 5 more Trenton wells were drilled in the Fairman pool a short distance to the southwest. Nine Chester sand wells were also completed in the Patoka-Fairman-Patoka South area.

Production declined in most pools and for the county as a whole. The Salem Consolidated pool, which produces most of the county's oil, is on a downward trend again after reaching a peak resulting from waterflooding. Marion County ranked third in the state in production, with an estimated 6,546,000 barrels of oil.

MONTGOMERY COUNTY

Montgomery County has one of the least satisfactory drilling records of any of the oil-producing counties in the state. During the two-year period of 1956 and 1957, 75 wells were drilled, 74 of which were dry. In spite of the decrease in drilling from 1956 to 1957 for the entire state, and Montgomery County's bad record for 1956 (31 dry holes), it was one of the few counties with major increases in drilling in 1957 (44 completions). The 1957 completions included one "producer," a Pennsylvanian sand gas well which has not been put into production. The 43 dry holes included 4 pool dry holes and 39 wildcats.

Montgomery County produced about 3,000 barrels of oil in 1957, most of it from the Raymond East or Panama pools.

MORGAN COUNTY

Two wells were drilled for oil or gas in Morgan County in 1957. One was completed as a pool dry hole and one as a wildcat.

All three of the Morgan County pools are predominantly gas. Jacksonville was abandoned in 1939. Prentice has had a few barrels of oil but no truly commercial oil or gas production. Efforts to use the Waverly pool for gas storage had not been successful up to the end of 1957.

MOULTRIE COUNTY

In 1957 there were 11 wells drilled in Moultrie County, all of them unsuccessful wildcats more than two miles from production.

The only pool in the county, Gays, produced 8,000 barrels of oil in 1957, giving the pool and county cumulative totals of 25,000 barrels.

PERRY COUNTY

Two of the 16 new oil and gas pools in Illinois in 1957 were discovered in Perry County, including one of the best of the new pools, Tamaroa South.

The number of wells drilled and the amount of oil produced in 1957 were high for the county, Perry being one of the few

counties which showed increases in both. Thirty-one wells were drilled. Eight were oil wells, 7 of them Cypress wells in the new Tamaroa South pool and the eighth a Trenton well which discovered the Turkey Bend pool. Six of the wells were dry holes in pools, 10 were unsuccessful wildcats near pools, and 7 were wildcats far.

Production for the county for 1957 was 32,000 barrels, almost double the 18,000 barrels produced in 1956. Tamaroa and Tamaroa South each produced 16,000 barrels. Tamaroa pool production declined about 2,000 barrels; the increase in production resulted entirely from the discovery of Tamaroa South.

PIKE COUNTY

No oil has been found in Pike County, but development of the Fishhook gas pool continued throughout 1957. Twenty-five wells were drilled during the year, 10 of which were classified as potential gas producers, although none was put on production. Three pool dry holes and 12 unsuccessful wildcats were drilled.

The Fishhook gas pool has the largest area of any gas pool in Illinois except the abandoned Pittsfield gas pool. The gas is in a shallow Silurian lime, and the volume is small. Prospects for marketing the gas are not encouraging, but the St. Peter sand has been tested, and it is possible that the pool may prove to be satisfactory for storing gas.

RANDOLPH COUNTY

Six wells were drilled in Randolph County in 1957—an oil well in the Baldwin pool, 2 dry holes in pools, and 3 wildcats. Although 3 Silurian oil wells have been completed in the Baldwin pool, it produced less than 1000 barrels of oil in 1957, bringing its total production up to 5000 barrels.

Almost all of the oil in Randolph County has come from one pool, Tilden, which produced 182,000 barrels in 1957 and should pass the 2,000,000 barrel mark by January 1958.

RICHLAND COUNTY

Richland County well completions for 1957 totalled only 41, as compared with 77 the previous year. The 41 wells included 21 producing wells, 13 dry holes in pools, and 7 wildcats within two miles of production. There were no wildcats far. Most of the new producing wells were in the Clay City Consolidated pool.

Most of the oil produced in Richland County comes from the Clay City Consolidated pool. Other pools in the county produced 459,000 barrels of oil in 1957. All pools except Dundas East had declines in production for the year. Total estimated production for Richland County for 1957 is 2,250,000 barrels of oil.

SALINE COUNTY

Drilling has fallen off rapidly in Saline County since the Eldorado "boom" ended. During 1955, at the height of drilling, 355 wells were completed, but in 1957 the number dropped to 75, only 27 of which, or about a third, were producers; 21 were pool dry holes and 27 were wildcats.

One new oil pool was discovered in Saline County in 1957. At the end of the year Grayson had two oil wells completed and had produced 6,000 barrels of oil from the Cypress and McClosky.

Raleigh South is the only Saline County pool to show an appreciable increase in production. Ten new Aux Vases oil wells were added to the pool in 1957, increasing its production from 117,000 barrels in 1956 to 186,000 barrels in 1957.

Harco, Harco East and Harrisburg pools dropped off to about a third of their 1956 production, Eldorado Consolidated and Dale Consolidated to about half and Raleigh to about two thirds. Annual production for the county, which reached 4,099,000 barrels in 1955 at the height of the Eldorado Consolidated development, was 1,273,000 barrels in 1957.

SANGAMON COUNTY

In 1957, 26 wells were drilled in Sangamon County, 25 of which were dry holes. The only successful completion was a wildcat which discovered the Roby West pool.

The discovery well, producing from the Hardin Sandstone, marketed no pipeline oil by the end of the year.

Six of the 25 dry holes were in pools, and the other 19 were wildcats.

One Sangamon County pool (Glenarm) was abandoned in 1957, after producing less than 1,000 barrels of oil. The 3 active pools produced a total of 20,000 barrels of oil in 1957, or one-half as much as in 1956. Total production for the county is 119,000 barrels, half of it in 1955, the first year of commercial production.

Exploration results have been discouraging in Sangamon County. The only pools discovered have been close to the Christian County line. Only 12 producing wells have been drilled, and production has declined rapidly.

SHELBY COUNTY

Results of drilling in Shelby County in 1957 were unusually successful. Five of the 26 wells drilled were producers, as compared to only one out of 18 in 1956. There were no discoveries, extensions, or new pays. The Stewardson pool had 4 new Aux Vases wells and the Clarksburg pool 1 Bethel well.

The 21 dry holes included 3 in pools, 5 wildcats near, and 13 wildcats far.

Shelby is one of the few counties in which production increased in 1957. As a result of its 4 new wells, the Stewardson pool increased its annual production 15,000 barrels, about equal to the county increase to 35,000 (in 1957) from 21,000 (in 1956). A small increase in production in the Clarksburg pool compensated for the losses in the Lakewood and Shelbyville Consolidated pools.

ST. CLAIR COUNTY

St. Clair County had 16 wells drilled in 1957. One was completed as an oil well in the Freeburg South gas pool, 4 as gas wells, 3 as dry holes in pools, and 8 as wildcats. One old well was worked over to produce gas, so the Freeburg South gas pool had 6 gas wells at the end of 1957. It is probable that this pool will be tested for its possibilities for gas storage.

The only oil production in St. Clair County is from the Dupo pool which produced 10,000 barrels in 1957.

WABASH COUNTY

Wabash County probably has a higher percentage of its area in oil production than any other county in Illinois. In 1957, 109 wells were drilled in the county, only 10 of which were wildcats, all of them less than two miles from production. A total of 40 new oil wells was drilled (most of them in Gards Point Consolidated, Allendale, New Harmony Consolidated and Browns East pools) and 59 dry holes in pools. In 1956 Wabash County was the only county in the southeastern part of the state with increased drilling. In 1957 the decrease in drilling for the county was at about the same rate as for the state.

Production for Wabash County for 1957 was about 3,135,000 barrels (estimated in part). This is a decrease of about 200,000 barrels from the previous year. Most of the pools in the county showed decreased production. Most notable increases were in Gards Point Consolidated, where production increased to 215,000 barrels from 84,000 in 1956, and Browns East, where production increased to 96,000 barrels from 65,000. About half of the new producers drilled during the year in Wabash County were located in these two pools.

WASHINGTON COUNTY

Decreases in drilling and production in 1957 in Washington County were about equal percentagewise to those for the state as a whole. The number of completions dropped from 135 in 1956 to 85 in 1957.

One new pool, New Memphis East, was discovered in 1957. At the end of the year the pool consisted of one well producing from the Devonian; no pipeline runs had yet been reported. Of the 85 wells completed, 30 were producers, including 12 in Dubois Consolidated pool, 5 each in McKinley and Cordes, 3 each in Irvington and Ashley, and 1 each in Dubois Central, Richview, and New Memphis East (the list includes one former dry hole reworked to producer). All produce from the Cypress

or Bethel sands in the Mississippian, the Devonian-Silurian, or the Trenton.

The 55 dry holes drilled during 1957 included 20 in pools, 26 wildcats near, and 9 wildcats far.

All of the pools except McKinley had decreases in production for the year. McKinley production increased from 7,000 in 1956 to 81,000 in 1957. Drops in the other pools brought the county total from 1,159,000 barrels for 1956 to 897,000 barrels in 1957.

WAYNE COUNTY

Drilling held up better in Wayne County than in most of the biggest oil producing counties in 1957. Wayne ranked second only to White County in total number of wells drilled (174) and second only to Lawrence County in number of producing wells (90) (White County had a low percentage of successful wells). In addition to 90 producing wells Wayne County had 59 dry holes in pools and 25 wildcats less than two miles from production. There were no far wildcats.

Wayne County ranked fourth in production for the year in the state with a decrease of about 2,500,000 barrels of oil. Production for the pools exclusive of the Clay City Consolidated pool was 2,351,000 barrels of oil. Including the Clay City Consolidated pool, production for the county was estimated at 5,351,000 barrels.

WHITE COUNTY

White County ranked first in Illinois in number of wells drilled during 1957 when 187 wells were completed. Completions had reached a high level of 478 in 1955, dropped to 262 in 1956. Producing wells made up about 60 percent of all completions in 1955, but dropped to 40 percent in 1957.

Wells drilled in 1957 in White County included 81 producers, 80 dry holes in pools, 25 wildcats within two miles of production, and one wildcat more than two miles from production.

Production in White County dropped from 9,055,000 barrels in 1956 to 7,819,000 barrels in 1957 (these figures are estimated

in part). During recent years White County has frequently ranked first in both drilling and production. In 1957 the waterflood operations in the Loudon pool resulted in Fayette County production greatly exceeding that of White County.

WILLIAMSON COUNTY

The first commercial oil production in Williamson County was discovered in 1957. The Marion pool, discovered in 1950, consisted of a single well which did not pay off.

Four of the 16 new pools discovered in Illinois in 1957 were in Williamson County, all in the northern part, within five miles of Franklin or Saline County. The first discovery was the Clifford pool in January. Only one producing well was completed during the year. It produced about 4,000 barrels from three pays, the Aux Vases, Rosiclare, and McClosky.

Corinth North, the second 1957 Williamson County pool, was discovered in February. It consists of 1 Aux Vases well which produced about 2000 barrels during the year.

Corinth East, a 1-well McClosky pool, was discovered in April. It made 6000 barrels for the year.

Corinth was the best of the Williamson County new pools and also one of the best in the state for 1957. Discovered in June, 7 producing wells had been completed by December 31. Production amounting to 52,000 barrels had been taken from two pays, the Aux Vases and Rosiclare.

A total of 44 wells were drilled in Williamson County in 1957 as compared with 81 in the preceding 20 years. In addition to the 10 producing wells in the four pools discussed above, there were 9 pool dry holes, 8 unsuccessful wildcats less than two miles from production and 17 more than two miles.

Production for the year was about 63,000 barrels.

Although results of drilling in Williamson County in 1957 can be considered only as fair, they were encouraging enough so that more than normal exploratory drilling will probably continue in 1958.

OTHER COUNTIES

Seventeen counties had only dry holes completed during 1957. Three of them have had production and are discussed on preceding pages (Hancock, Jackson, and Morgan counties).

The 14 counties with no production and no successful completions in 1957 include

Brown and Ford counties with 6 wildcats each, Champaign with 4, Pope and Schuyler with 3 each, and Alexander with 2. One well was completed in each of the remaining 8 counties: Bureau, DeWitt, Johnson, Kankakee, LaSalle, Mercer, Piatt, and Tazewell.

Footnotes to Tables 11 and 12, p. 40-70.

- ^a Cam, Cambrian; Ord, Ordovician; Sil, Silurian; Dev, Devonian; Mis, Mississippian; Pen, Pennsylvanian.
- ^b L, limestone; LS, sandy limestone; OL, oolitic limestone; D, dolomite; DS, sandy dolomite; S, sandstone.
- ^c A, anticlinal; AC, anticline with accumulation due to change in character of rock; AF, anticline with faulting as an important factor; Af, anticline with faulting as a minor factor; AL, anticline-lens; AM, accumulation due to both anticlinal and monoclinical structures; D, dome; H, strata horizontal or nearly horizontal; MC, monocline with accumulation due to change in character of rock; MF, monocline-fault; ML, monocline-lens; MU, monocline-unconformity; R, reef.
- ^x Not determinable.
- ¹ Producing from 2 or more pays.
 - ² Abandoned 1945; revived 1950.
 - ³ Total of lines, 2, 8, 12, 13, 18, 25, 31 and 36.
 - ⁴ Includes Allison-Weger, Birds, Chapman, Flat Rock, Hardinsville, Kibbe, New Hebron, Oblong, Parker, Robinson, and Swearingen Gas.
 - ⁵ Pool also listed in Table 12.
 - ⁶ Pool also listed in Table 11.
 - ⁷ Total of lines 57 and 68.
 - ⁸ Total of lines 1, 37, 38, 69, 70.
 - ⁹ Abandoned 1943; revived (oil) 1956; abandoned 1957.
 - ¹⁰ Reef structure.
 - ¹¹ Abandoned 1925; revived 1942.
 - ¹² Anticlinal structure with change in character of rock.
 - ¹³ Anticline lens.
 - ¹⁴ Abandoned 1921.
 - ¹⁵ Abandoned 1933; revived 1949.
 - ¹⁶ Abandoned 1950.
 - ¹⁷ Abandoned 1935.
 - ¹⁸ Abandoned 1923; revived 1957.
 - ¹⁹ Abandoned 1939.
 - ²⁰ Abandoned 1904; revived 1942.
 - ²¹ Gas not used until 1905; oil abandoned 1930; oil revived 1957.
 - ²² Abandoned 1934.
 - ²³ Abandoned 1900.
 - ²⁴ Abandoned 1919.
 - ²⁵ Abandoned 1930; revived 1939; converted in part to gas storage 1951.
 - ²⁶ Total of lines.
 - ²⁷ Total of lines.
 - ²⁸ Has produced in multiple pay or work-over wells only. No original single completions.
 - ²⁹ Abandoned 1953.
 - ³⁰ Abandoned 1953.
 - ³¹ Abandoned 1954.
 - ³² Abandoned 1957.
 - ³³ Abandoned 1954.
 - ³⁴ Abandoned 1946.
 - ³⁵ Abandoned 1950.
 - ³⁶ Abandoned 1956.
 - ³⁷ Abandoned 1955.
 - ³⁸ Abandoned 1954.
 - ³⁹ Abandoned 1952.
 - ⁴⁰ Abandoned 1952.
 - ⁴¹ Abandoned 1953.
 - ⁴² Abandoned 1954.
 - ⁴³ Abandoned 1953.
 - ⁴⁴ Abandoned 1949; revived 1952.
 - ⁴⁵ Abandoned 1948.
 - ⁴⁶ Abandoned 1951; revived and consolidated with North City 1953.
 - ⁴⁷ Includes Concord North.
 - ⁴⁸ Includes Cooks Mills North, Cooks Mills East and Cooks Mills Gas.
 - ⁴⁹ Abandoned 1951.
 - ⁵⁰ Abandoned 1952; revived 1956.
 - ⁵¹ Abandoned 1953; revived 1956.
 - ⁵² Includes Cantrell Consolidated, Flannigan, Rural Hill West, and West End.
 - ⁵³ Abandoned 1955.
 - ⁵⁴ Abandoned 1946.
 - ⁵⁵ Includes Dubois West.
 - ⁵⁶ Abandoned 1951.
 - ⁵⁷ Includes Eldorado Central and Eldorado North.
 - ⁵⁸ Abandoned 1940.
 - ⁵⁹ Abandoned 1943; revived and abandoned 1951; revived 1954.
 - ⁶⁰ Abandoned 1952; revived 1953.
 - ⁶¹ Abandoned 1957.
 - ⁶² Abandoned 1956.
 - ⁶³ Abandoned 1951; revived 1952.
 - ⁶⁴ Abandoned 1949; revived 1953.
 - ⁶⁵ Abandoned 1951.
 - ⁶⁶ Abandoned 1952; revived 1955.
 - ⁶⁷ Abandoned 1952.
 - ⁶⁸ Abandoned 1957.
 - ⁶⁹ Includes Gards Point North.
 - ⁷⁰ Abandoned 1950; revived 1955.
 - ⁷¹ Abandoned 1957.
 - ⁷² Abandoned 1957.
 - ⁷³ Abandoned 1956.
 - ⁷⁴ Includes Concord South Consolidated.
 - ⁷⁵ Abandoned 1952.
 - ⁷⁶ Abandoned 1950.
 - ⁷⁷ Abandoned 1944.
 - ⁷⁸ Abandoned 1945; revived 1951.
 - ⁷⁹ Abandoned 1957.
 - ⁸⁰ Abandoned 1950.
 - ⁸¹ Abandoned 1954.
 - ⁸² Abandoned 1946; revived 1954.
 - ⁸³ Abandoned 1945; revived 1950.
 - ⁸⁴ Abandoned 1957.
 - ⁸⁵ Includes Mason and Mason South.
 - ⁸⁶ Abandoned 1945.
 - ⁸⁷ Abandoned 1947.
 - ⁸⁸ Abandoned 1946.
 - ⁸⁹ Abandoned 1952.
 - ⁹⁰ Abandoned 1954.
 - ⁹¹ Abandoned 1956.
 - ⁹² Abandoned 1950.
 - ⁹³ Abandoned 1941.
 - ⁹⁴ Abandoned 1951.
 - ⁹⁵ Abandoned 1953.
 - ⁹⁶ Abandoned 1947.
 - ⁹⁷ Abandoned 1952; revived 1955.
 - ⁹⁸ Includes Maunie West.
 - ⁹⁹ Includes Maunie.
 - ¹⁰⁰ Abandoned 1950.
 - ¹⁰¹ Abandoned 1952.
 - ¹⁰² Abandoned 1956.
 - ¹⁰³ Illinois portion only.
 - ¹⁰⁴ Abandoned 1957.
 - ¹⁰⁵ Abandoned 1948; revived 1952; abandoned 1954; revived 1956.
 - ¹⁰⁶ Abandoned 1952; revived 1956.
 - ¹⁰⁷ Abandoned 1948.
 - ¹⁰⁸ Abandoned 1953.
 - ¹⁰⁹ Abandoned 1949.
 - ¹¹⁰ Abandoned 1954.
 - ¹¹¹ Abandoned 1957.
 - ¹¹² Abandoned 1957.
 - ¹¹³ Abandoned 1951.
 - ¹¹⁴ Abandoned 1954.
 - ¹¹⁵ Abandoned 1946; revived and abandoned 1956.
 - ¹¹⁶ Abandoned 1942.
 - ¹¹⁷ Abandoned 1951; revived 1954.
 - ¹¹⁸ Includes Stokes-Brownsville, Iron, Norris City and Gossett.
 - ¹¹⁹ Abandoned 1950; revived 1956.
 - ¹²⁰ Abandoned 1957.
 - ¹²¹ Abandoned 1957.
 - ¹²² Abandoned 1951.
 - ¹²³ Abandoned 1952; revived 1955; abandoned 1956.
 - ¹²⁴ Abandoned 1949; revived 1950; abandoned 1951; revived 1955.
 - ¹²⁵ Abandoned 1952.
 - ¹²⁶ Abandoned 1956.
 - ¹²⁷ Abandoned 1947.
 - ¹²⁸ Abandoned 1954.
 - ¹²⁹ Abandoned 1950; revived 1955.
 - ¹³⁰ Abandoned 1953; revived 1955.
 - ¹³¹ Includes Shelbyville East.
 - ¹³² Includes Sorento South.
 - ¹³³ Abandoned 1956.
 - ¹³⁴ Abandoned 1950.
 - ¹³⁵ Includes Epworth Consolidated.
 - ¹³⁶ Abandoned 1950.
 - ¹³⁷ Abandoned 1956.
 - ¹³⁸ Abandoned 1947.
 - ¹³⁹ Abandoned 1947; revived 1953; abandoned 1954.
 - ¹⁴⁰ Abandoned 1955.
 - ¹⁴¹ Abandoned 1957.
 - ¹⁴² Abandoned 1956.
 - ¹⁴³ Abandoned 1956.
 - ¹⁴⁴ Abandoned 1952; no gas marketed.

TABLE 11.—OIL PRODUCTION IN ILLINOIS, 1957

Line No.	Pool: County	Year of discovery	Oil production (M bbls.)			Total proved area (acres)	Producing formation			Number of wells				Structure ^c	Deepest zone tested		
			During 1957		To end of 1957		Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thickness (ft.)	Completed to end of 1957	1957			Name	Depth of hole (ft.)	
			Secondary recovery	Total								Completed	Abandoned				Producing of year
1	Warrenton-Borton: Edgar, Coles	1906	0	x	0	32	150 Unnamed: Pen	S	200	20	29	0	0	2 ML	Trenton	2,212	
2	Westfield: Clark, Coles	1904	4	x	45	x	10,000 Gas: Pen	S	280	25	1,673	6	5	183 D	St. Peter	3,099	
3			4	x	45	x	9,050 Westfield: Mis	L	335	x	208	0	0	D			
4			0	x	0	x	9,000 Carper: Mis	S	875	18	10	3	0	D			
5			0	x	0	x	110 Trenton: Ord	L	2,300	40	21	2	0	D			
6			0	x	0	x	340				4	1	0	D			
7	Siggins: Cumberland, Clark	1906	x	x	x	x	4,000 1st (Upper) Siggins: Pen	S	400	25	1,043	1	2	447 D	Dev	2,069	
8			x	x	x	x	3,200 2nd (Lower) Siggins: Pen	S	460	x	889	1	0	D			
9			x	x	x	x	500 3rd & 4th Siggins: Pen	S	580	40	93	0	x	D			
10			0	x	0	x	1,000 Isabel: Pen	S	590	15	71	0	0	D			
11			x	x	x	x	350 Upper Gas: Pen	S	265	x	42	0	0	AM	Dev	2,642	
12	York: Cumberland, Clark ²	1907	x	x	x	x	200 Lower Gas: Pen	S	300	x	83	0	0	AM	Dev	1,717	
13	Casey: Clark	1906	0	x	0	x	400 Casey: Pen	S	445	10	327	1	0	AM			
14			0	x	0	x	1,550 Carper: Mis	S	1,300	50	10	7	0	AM			
15			0	x	0	x	1,000 Shallow: Pen	S	255	x	9	13	5	137 D	St. Peter	3,411	
16			0	x	61	x	50 Casey: Pen	S	480	x	83	0	0	D			
17	Martinsville: Clark	1907	34	x	61	x	380 Martinsville: Mis	L	1,340	40	64	11	3	D			
18			0	x	0	x	1,000 Carper: Mis	L	1,550	x	43	0	0	D			
19			0	x	0	x	680 Devonian: Dev	L	2,700	x	2	0	0	D			
20			0	x	0	x	20 Trenton: Ord	L									
21			0	x	0	x	2,440 Kickapoo: Pen	S	315	x	505	6	4	234 AM	Dev	2,260	
22	Johnson North: Clark	1907	0	x	0	x	200 Claypool: Pen	S	415	x	301	2	1	AM			
23			0	x	0	x	1,220 Casey: Pen	S	465	x	183	0	0	AM			
24			x	x	x	x	900 Upper Partlow: Pen	S	535	x	49	2	2	AM			
25			x	x	x	x	270 Carper: Mis	S	1,325	x	4	2	0	AM			
26			0	x	0	x	40 Claypool: Pen	S	390	x	571	3	1	216 AM	Dev	2,030	
27	Johnson South: Clark	1907	328	x	2,021	x	2,250 Casey: Pen	S	450	x	60	0	0	AM			
28			x	x	x	x	300 Upper Partlow: Pen	S	490	48	431	2	0	AM			
29			x	x	x	x	1,700 Lower Partlow: Pen	S	600	x	176	1	1	AM			
30			0	x	0	x	850 "500 ft.": Pen	S	560	30	311	0	2	AM	Mis	1,471	
31			118	x	1,613	x	x "900 ft.": Mis	S	815	x	75	0	x	AM			
32			118	x	1,613	x	x "900 ft.": Mis	S	885	x	184	0	x	AM			
33			0	x	0	x	10 Cypress: Mis	S	1,210	4	1	0	0	AM			
34			0	x	0	x	20 Renault: Mis	S	830	6	2	0	x	AM			
35	Bellair: Crawford, Jasper	1907	0	x	0	x	40 Aux Vases: Mis	S	800	x	3	1	x	AM			
36			0	x	0	x	20 Ohara: Mis	L	860	4	1	0	0	A			
37			0	x	0	x											
38			0	x	0	x											
39			0	x	0	x											
40			0	x	0	x											
41			0	x	0	x											
42			0	x	0	x											
43			0	x	0	x											
44	Clark County Division ³	1906	x	1,602	x	72,084	24,540				5,095	38	21	1,624	St. Peter	3,411	
45	Main Consol: Crawford, Lawrence ^{4, 5}		x	2,964	x	174,577	85,000				9,734	78	179	4,389	St. Peter	4,651	
46			0	x	0	x	x Cuba: Pen	S	510	x	74	0	4	0	ML		
47			0	x	0	x	x Unnamed: Pen	S	750	5	2	0	0	0	ML		

48	x	x	x	x	x	x	x	x	x	950	25	9,326	54	x	ML		
49	x	x	x	x	x	x	x	x	x	1,250	27	2	x	ML			
50	0	0	0	0	0	0	0	0	0	1,480	15	34	2	x	ML		
51	0	0	0	0	0	0	0	0	0	1,280	30	0	0	0	ML		
52	0	0	0	0	0	0	0	0	0	1,400	18	95	8	x	ML		
53	0	0	0	0	0	0	0	0	0	1,430	15	43	1	x	ML		
54	0	0	0	0	0	0	0	0	0	1,515	6	1	0	0	MC		
55	0	0	0	0	0	0	0	0	0	1,400	x	112	0	x	MC		
56	0	0	0	0	0	0	0	0	0	1,815	5	12	0	0	MC		
57	0	0	0	0	0	0	0	0	0	2,795	11	2	0	0	MC		
58	Lawrence: Lawrence, Crawford	1906	x	x	x	x	x	x	x	39,200	5,018	85	x	62	2,156	St. Peter	5,190
59	0	0	0	0	0	0	0	0	0	290	x	11	0	1	A		
60	0	0	0	0	0	0	0	0	0	450	x	1	0	0	A		
61	0	0	0	0	0	0	0	0	0	800	40	1,261	1	x	A		
62	0	0	0	0	0	0	0	0	0	950	15	14	9	x	A		
63	0	0	0	0	0	0	0	0	0	1,250	15	511	1	x	A		
64	0	0	0	0	0	0	0	0	0	1,410	10	2	1	x	A		
65	0	0	0	0	0	0	0	0	0	1,570	10	1	0	x	A		
66	0	0	0	0	0	0	0	0	0	1,370	15	246	0	x	A		
67	0	0	0	0	0	0	0	0	0	1,400	30	3,158	26	x	A		
68	0	0	0	0	0	0	0	0	0	1,600	8	6	0	x	A		
69	0	0	0	0	0	0	0	0	0	1,680	20	882	25	x	A		
70	0	0	0	0	0	0	0	0	0	1,695	7	3	0	0	A		
71	0	0	0	0	0	0	0	0	0	1,775	8	16	0	0	A		
72	0	0	0	0	0	0	0	0	0	1,750	8	3	x	x	A		
73	0	0	0	0	0	0	0	0	0	1,860	4	21	2	x	A		
74	0	0	0	0	0	0	0	0	0	1,860	10	1,020	5	x	A		
75	0	0	0	0	0	0	0	0	0	1,660	10	3	0	0	A		
76	0	0	0	0	0	0	0	0	0	1,660	10	3	0	0	A		
77	0	0	0	0	0	0	0	0	0	1,955	2	1	0	0	A		
78	0	0	0	0	0	0	0	0	0	1,845	6	82	5	2	44	ML	2,164
79	St. Francisville: Lawrence	x	x	x	x	x	x	x	x	700	Bethel: Mis						
80	Lawrence County Division ⁷	1912	x	4,498	x	266,862	39,900	x	x	5,190	90	923	10	64	2,200	St. Peter	5,190
81	Allendale: Wabash, Lawrence	1912	0	630	x	16,309	8,100	x	x	923	30	3	0	32	420	Mis	2,571
82	0	0	0	0	0	0	0	0	0	660	12	x	0	0	AM		
83	0	0	0	0	0	0	0	0	0	1,070	15	x	1	x	AM		
84	0	0	0	0	0	0	0	0	0	1,290	20	617	2	x	AM		
85	0	0	0	0	0	0	0	0	0	1,450	10	5	0	x	AM		
86	0	0	0	0	0	0	0	0	0	1,490	15	24	0	x	AM		
87	0	0	0	0	0	0	0	0	0	1,540	20	12	0	x	AM		
88	0	0	0	0	0	0	0	0	0	1,600	20	12	0	x	AM		
89	0	0	0	0	0	0	0	0	0	1,780	10	1	0	x	AM		
90	0	0	0	0	0	0	0	0	0	1,920	10	50	6	x	AM		
91	0	0	0	0	0	0	0	0	0	2,010	10	82	0	x	AM		
92	0	0	0	0	0	0	0	0	0	2,280	12	3	0	x	AM		
93	0	0	0	0	0	0	0	0	0	2,280	10	10	0	x	AM		
94	0	0	0	0	0	0	0	0	0	2,300	5	3	0	x	AM		
95	0	0	0	0	0	0	0	0	0	2,300	8	14+	0	x	AM		
96	0	0	0	0	0	0	0	0	0	2,300	13	1	x	x	AM		
97	Total Southeastern Fields ⁸	1916	x	9,694	x	530,864	157,690	x	x	20,881	216	296	8,635	0	A	Trenton	3,582
98	Ava-Campbell Hill: Jackson ^{5, 9}	1936	0	0	0	840	600	0	0	780	18	16	0	1	0	D	4,212
99	Bartleson: Clinton	1910	154	251	x	3,143	350	0	0	985	15	51	0	3	D		
100	0	0	0	0	0	840	250	0	0	2,420	12	27	0	5	R ¹⁰		
101	Brown, Junction City, Langewisch-																
102	Kuester: Marion																
103	0	0	0	0	0	0	340	0	0	510	20	34	0	1	6	M. Dev	3,405
104	0	0	0	0	0	0	x	0	0	845	7	x	0	0	MF		

[illegible]

271					0	0	0	x	40	Rosiclare: Mis	LS	2,835	5	1	0	0	ML	
272					0	1	0	x	60	McClosky: Mis	L	2,875	5	2	0	0	M	
273																		
274	Bible Grove South:	Clay	1942		0	4	0	106	50	Cypress: Mis	S	2,500	10	1	0	0	2	Mis
275					0	5	0	6	10	Aux Vases: Mis	S	2,740	10	3	0	0	ML	
276					0	3.5	0	100	40	Cypress: Mis	S	2,740	10	2	0	0	ML	
277	Blackland: Macon, Christian		1953		0	59	0	304	630	Slurian: Sil	L	1,935	12	23	8	2	17	MU
278	Black River: White		1952		0	1	0	13	10	Clore: Mis	S	1,865	6	1	0	0	1	x
279	Blairsville West: Hamilton		1951		0	10	0	329	200		S	3,345	6	10	0	0	4	Mis
280					0	x	x	x	20	Rosiclare: Mis ^{a8}	L	3,345	6	0	0	0	AC	
281					0	x	0	x	200	McClosky: Mis	L	3,405	8	9	0	1	AC	
282						281	0							1	0	0		
283	Bogota: Jasper		1943		0	283	0	470	280		L	3,090	4	1	0	2	4	Mis
284					0	1	0	5	20	Rosiclare: Mis	L	3,110	7	8	0	2	AC	
285					0	285	0	465	260	McClosky: Mis	L	3,080	3	1	0	0	A	
286	Bogota North: Jasper ^{a3}		1949		0	0	0	0	10	McClosky: Mis	L	3,075	8	23	0	0	0	Mis
287	Bogota South: Jasper		1944		0	15	0	433	480	McClosky: Mis	L	3,075	8	23	0	0	17	MC
288	Bone Gap Consolidated: Edwards		1941		24	50	315	1,907	1,210		S	2,110	8	58	0	1	28	Mis
289					0	2	0	2	150	Pennsylvanian: Pen	S	2,310	20	15	0	0	0	AL
290					24	290	x	x	70	Waltersburg: Mis	S	2,710	10	7	0	0	0	A
291					0	2	0	246	30	Cypress: Mis	S	2,880	14	3	0	1	AL	
292					0	x	0	x	30	Bethel: Mis	S	3,020	9	1	0	0	AL	
293					0	x	0	10	10	Aux Vases: Mis	S	3,040	5	2	0	0	AC	
294					0	x	0	x	80	Ohara: Mis	L	3,045	5	3	0	0	AC	
295					0	x	0	x	80	Rosiclare: Mis	L	3,045	5	3	0	0	AC	
296					0	x	0	x	800	McClosky: Mis	L	3,200	6	24	0	0	AC	
297						297	0							2	0	0		
298	Bone Gap East: Edwards ^{a6}		1951		0	0	0	13	40		L	2,980	10	2	0	0	0	Mis
299					0	299	0	0	20	Ohara: Mis	L	2,980	10	2	0	0	0	MC
300					0	0	0	0	20	McClosky: Mis	L	3,050	5	1	0	0	0	MC
301	Bone Gap West: Edwards ^{a7}		1954		0	301	0	2	20	Ohara: Mis	L	3,290	5	1	0	0	0	Mis
302	Boulder: Clinton		1941		0	311	0	6,316	720		L	3,290	5	1	0	0	31	D
303					0	303	0	x	530	Bethel: Mis	S	1,190	20	27	0	0	0	R
304					0	304	0	x	540	Geneva: Dev	D	2,630	7	20	0	0	0	
305	Boulder East: Clinton		1955		0	6	0	18	40	Devonian: Dev	L	2,850	5	2	1	0	1	Dev
306	Bourbon: Douglas		1956		0	273	0	763	680	Rosiclare: Mis	LS	1,600	12	65	14	0	64	x
307	Bourbon North: Douglas		1956		0	8	0	15	40	Rosiclare: Mis	LS	1,600	12	65	14	0	2	x
308	Boyd: Jefferson		1944		381	918	848	12,285	1,430		LS	1,650	16	2	0	0	111	A
309					381	309	x	848	680	Bethel: Mis	S	2,060	19	74	1	0	0	Dev
310					0	310	0	x	680	Aux Vases: Mis	S	2,130	15	6	0	0	0	A
311					0	x	0	x	40	Ohara: Mis ^{a3}	L	2,230	2	0	0	0	0	AC
312					0	x	0	0	1		L	2,230	2	36	0	0	0	
313	Broughton: Hamilton ^{a3}		1951		0	0	0	6	20	McClosky: Mis	L	3,275	5	1	0	0	0	Mis
314	Broughton South: Saline ^{a9}		1951		0	314	0	0	20	McClosky: Mis	L	3,215	4	1	0	0	0	Mis
315	Browns: Edwards, Wabash		1943		0	315	0	1,636	910		L	3,215	4	51	0	4	33	Mis
316					0	316	0	x	10	Tar Springs: Mis ^{a8}	S	2,365	14	0	0	0	AL	
317					0	317	0	x	280	Cypress: Mis	S	2,640	13	11	0	0	0	A
318					0	x	0	x	50	Bethel: Mis	S	2,785	12	1	0	0	AL	
319					0	x	0	x	10	Aux Vases: Mis	S	2,965	7	1	0	0	AL	
320					0	x	0	x	40	Ohara: Mis	L	2,965	4	2	0	0	AC	
321					0	x	0	x	20	Rosiclare: Mis ^{a8}	L	2,975	3	0	0	0	AC	
322					0	x	0	x	600	McClosky: Mis	L	3,000	6	27	0	4	A	
323						322	0		1					9	0	0	0	
324	Browns East: Wabash		1946		x	96	x	2,375	580	Cypress: Mis	S	2,570	13	57	5	0	44	ML
325	Browns South: Edwards		1943		0	1	0	18	30		S	2,850	15	3	0	0	1	Mis
326					0	326	0	x	20	Bethel: Mis	S	2,850	15	1	0	0	0	NL
327					0	x	0	x	20	Aux Vases: Mis	S	2,950	8	1	0	0	0	NL
328						327	0		1					1	0	0	0	
329	Bungay Consolidated: Hamilton		1941		118	498	590	9,971	3,360		S	3,270	10	227	11	0	186	A
330					x	x	0	x	3,180	Renault: Mis	S	3,270	10	15	2	x	AL	
331					118	x	590	x	3,020	Aux Vases: Mis	L	3,295	15	181	0	x	AL	
332					0	x	0	x	80	Ohara: Mis	L	3,335	8	2	0	0	AC	
																		3,565

393	Centralia West: Clinton	1940	0	3	0	0	389	90 Bethel: Mis	S	1,440	9	9	0	0	0	2	N	Dev	3,021
394	Chesterville: Douglas	1956	0	9	0	0	21	100 Rosiclare: Mis	LS	1,780	8	5	0	1	3	x	Mis	1,926	
395	Chesterville East: Douglas	1957	0	464	0	0	464	400 Rosiclare: Mis	S	1,720	10	40	40	0	40	x	Mis	1,785	
396	Christopher Consolidated: Franklin ⁴⁶	1951	0	68	0	0	321	420						27	A	Dev	4,603		
397			0	397	0	0	x	360 Aux Vases: Mis	S	2,605	15	22	6	0	0	0	A		
398			0	398	0	0	x	20 Ohara: Mis	L	2,675	8	1	0	0	0	0	A		
399			0	399	0	0	x	20 St. Louis: Mis ²³	L	3,002	20	1	0	0	0	0	x		
400			0	400	0	0	x	100 Clear Creek: Dev	L	4,430	x	1	0	0	0	0	A		
401			0	401	0	0	24	30 Bethel: Mis	S	1,770	6	4	1	3	0	0	0		
402	Clarksburg: Shelby	1946	0	3	0	0								2	A	Dev	3,206		
403	Clay City Consolidated: Clay, Wayne, Richland, Jasper	1937	1,807	7,791	4,111	196,336	84,000	10 Waltersburg: Mis	S	4,379	6	3	84	72	3,217	A	St. Peter	7,205	
404			0	x	0	0	x	100 Tar Springs: Mis	S	2,175	15	8	0	0	0	AL			
405			0	405	0	0	x	160 Cypress: Mis	S	2,560	15	8	0	0	0	AL			
406			149	0	153	0	x	5,800 Cypress: Mis	S	2,635	15	416	5	0	x	AL			
407			0	407	0	0	x	100 Bethel: Mis	S	2,800	15	3	0	0	x	AL			
408			712	0	1,242	0	x	14,800 Aux Vases: Mis	S	2,940	15	1,297	45	0	x	AL			
409			0	409	x	x	x	x Ohara: Mis	OL	3,020	5	113	3	x	x	AC			
410			x	410	x	x	x	x Rosiclare: Mis	LS	3,030	8	285	3	x	x	AC			
411			x	411	x	x	x	x McClosky: Mis	OL	3,050	10	2,038	22	x	x	AC			
412			x	412	x	0	x	240 St. Louis: Mis	L	3,025	3	9	0	x	x	A			
413			0	413	0	0	x	1,500 Salem: Mis	L	3,590	10	66	2	0	x	A			
414			0	414	x	0	x	10 Warsaw: Mis ²³	L	3,600	17	0	0	0	0	A			
415			0	415	0	0	0	20 Devonian: Dev ²³	L	4,350	10	0	0	0	0	A			
416			0	416	0	0		1					25	0	0				
417	Clay City West: Clay	1941	0	66	0	1,755	560	Cypress: Mis	S	2,700	10	1	0	0	15	A	Dev	4,973	
418			0	418	0	0	20	10 Cypress: Mis	S	2,700	10	1	0	0	0	AL			
419			0	419	0	0	x	80 Aux Vases: Mis	S	2,950	7	1	0	0	0	AL			
420			0	420	0	0	x	540 McClosky: Mis	OL	3,065	15	23	0	1	AL				
421	Clifford: Williamson	1957	0	421	4	4	20	20					1	1	x	Mis	2,625		
422			0	422	0	0	x	10 Aux Vases: Mis ²³	S	2,380	7	0	0	0	0	x			
423			0	423	0	0	x	20 Rosiclare: Mis ²³	LS	2,470	7	0	0	0	0	x			
424			0	424	0	0	x	20 McClosky: Mis ²³	L	2,540	5	1	0	0	0	x			
425			0	425	0	0		1					1	0	0				
426	Coll: Wayne	1942	0	28	0	1,421	480	Aux Vases: Mis	S	2,700	10	16	0	0	12	A	Mis	3,250	
427			0	427	0	1,420	460	McClosky: Mis	OL	3,065	15	1	0	0	0	A			
428			0	428	0	0	1	20					19	3	0	AC			
429	Coil West: Jefferson	1942	0	18	0	602	360	Aux Vases: Mis	S	2,720	15	6	2	0	11	A	Mis	3,022	
430			0	430	0	0	x	120 Aux Vases: Mis	L	2,790	7	1	0	0	0	AL			
431			0	431	0	0	x	200 Ohara: Mis	L	2,790	7	1	0	0	0	AC			
432			0	432	0	0	x	40 Rosiclare: Mis ²³	L	2,805	x	0	0	0	0	AC			
433			0	433	0	0	x	240 McClosky: Mis	L	2,880	8	6	1	0	0	AC			
434			0	434	0	0		1					6	0	0				
435	Concord Consolidated: White ⁴⁷	1942	25	278	167	4,731	1,750	Tar Springs: Mis	S	2,270	11	20	0	2	130	A	Mis	3,138	
436			0	436	0	0	x	200 Hardinsburg: Mis	S	2,510	7	17	16	0	0	AL			
437			0	437	0	0	x	200 Cypress: Mis	S	2,625	10	15	0	0	0	AL			
438			0	438	0	0	x	230 Cypress: Mis	S	2,905	14	27	3	0	0	AL			
439			9	439	47	0	x	480 Aux Vases: Mis	L	2,930	8	2	0	0	0	AC			
440			0	440	x	0	x	40 Ohara: Mis	L	3,035	8	2	0	0	0	AC			
441			x	441	x	x	x	60 Rosiclare: Mis	L	2,990	10	44	0	2	0	0	AC		
442			x	442	x	x	x	1,120 McClosky: Mis	L	2,990	10	44	0	2	0	0	AC		
443			0	443	0	0		1					14	0	0				
444	Concord East Consolidated: White	1942	0	111	0	404	370	Waltersburg: Mis	S	2,140	10	3	8	4	27	A	Mis	3,125	
445			0	445	0	0	x	30 Tar Springs: Mis	S	2,175	10	5	2	1	0	A			
446			0	446	0	0	x	60 Cypress: Mis	L	2,540	6	16	4	1	0	A			
447			0	447	0	0	x	180 Cypress: Mis	L	2,800	6	1	0	0	0	A			
448			0	448	0	0	x	10 Renault: Mis	L	2,825	12	3	0	1	0	A			
449			0	449	0	0	x	60 Aux Vases: Mis	L	2,895	5	6	2	0	0	AC			
450			0	450	0	0	x	40 Ohara: Mis	S	2,895	5	1	1	0	0	AC			
451			0	451	0	0	x	80 Rosiclare: Mis	L	2,895	5	1	1	0	1	0	AC		
452			0	452	0	0	x	30 McClosky: Mis	L	2,965	2	1	1	0	1	0	AC		
453			0	453	0	0	x						4	1	0				

TABLE 11.—(Continued.)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.)			Total proved area (acres)	Producing formation			Number of wells				Structure	Deepest zone tested				
			During 1957		To end of 1957		Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thickness (ft.)	Completed to end of 1957	1957			Name	Depth of hole (ft.)			
			Secondary recovery	Total								Secondary recovery	Total				Completed	Abandoned	Producing end of year
454	Cooks Mills Consolidated: Douglas ⁴⁸ , 48	1941	0	480	0	1,787	2,950	Cypress: Mis	S	1,600	20	222	18	3	212	A	Dev	2,888	
455			0	x	0	x	10	Aux Vases: Mis	S	1,765	15	1	0	0	0	A			
456			0	x	0	x	20	Rosclaire: Mis	S	1,800	9	218	18	3	0	A			
457			0	x	0	x	20	McClosky: Mis	L	1,840	4	1	0	0	0	A			
458			0	x	0	x	1					1	0	0	0				
459			82	219	2,222	7,535	1,260	Bethel: Mis	S	1,260	14	5	0	0	93	A	Dev	2,887	
460	Cordes: Washington	1939	0	52	0	52	80	Aux Vases: Mis	S	2,885	10	5	5	0	0	7	x	Mis	3,150
461	Corinth: Williamson	1957	0	x	0	x	40	Rosclaire: Mis	L	2,985	10	1	1	0	0	x			
462			0	x	0	x	1		L	3,035	10	1	1	0	0	1	x	Mis	3,113
463			0	6	0	6	20	McClosky: Mis	L	2,935	16	1	1	0	0	1	x	Mis	2,977
464	Corinth East: Williamson	1957	0	2	0	2	10	Aux Vases: Mis	L	2,770	1	0	0	0	0	1	x	Mis	3,397
465	Corinth North: Williamson	1955	0	2	0	2	20	Ohara: Mis	L	3,310	5	8	0	0	2	AC	Mis	3,735	
466	Cottage Grove: Saline	1943	0	5	0	5	320	McClosky: Mis	L	3,650	20	1	0	0	0	A	Ord	2,363	
467	Covington South: Wayne	1948	0	5	0	5	20	Trenton: Ord	L	2,070	10	11	0	0	7	A	Mis	2,320	
468	Craig: Perry ⁴⁹	1939	0	5	0	337	120	Bethel: Mis	S	1,045	10	11	1	0	0	0	x	Mis	3,251
469	Cravat: Jefferson	1956	0	x	0	x	130	Pennsylvanian: Pen	S	2,880	9	3	0	1	1	0	M	Mis	3,242
470	Cravat West: Jefferson	1956	0	0	0	0	30	Bethel: Mis	S	3,030	8	5	4	0	0	ML			
471	Crossville: White ⁵⁰	1946	0	0	0	0	20	Aux Vases: Mis	S	3,100	3	1	0	0	0	ML			
472			0	0	0	0	60	McClosky: Mis	L	3,120	5	4	1	0	0	MC			
473			0	0	0	0	1		L			1	0	0	0	MC			
474			0	124	0	129	150	Aux Vases: Mis	S	3,030	8	5	4	0	9	M	Mis	3,242	
475			0	x	0	x	60	McClosky: Mis	L	3,185	5	4	0	0	0	ML			
476			0	x	0	x	100	McClosky: Mis	L	3,300	11	43	0	1	2	A	Dev	5,299	
477			0	4	0	4	700	McClosky: Mis	L	4,110	15	43	0	1	0	A			
478	Crossville West: White ⁵¹	1952	0	1	0	2	20	Warsaw: Mis	L			1	0	0	0	A			
479			0	x	0	x	150					64	19	1,011	A	Dev	5,345		
480			0	x	0	x	400	Tar Springs: Mis	S	2,430	25	1,279	64	19	1,011	A	Dev	5,345	
481	Dahlgren: Hamilton	1941	0	4	0	4	100	Hardingsburg: Mis ⁵³	S	2,480	10	25	0	x	0	A			
482			0	x	0	x	900	Cypress: Mis	S	2,700	15	49	0	1	0	A			
483			0	x	0	x	230	Paint Creek: Mis	S	2,950	18	110	1	x	0	A			
484			0	x	0	x	2,100	Bethel: Mis	S	2,975	18	110	1	x	0	A			
485			174	0	767	0	12,100	Aux Vases: Mis	S	3,150	20	836	61	x	0	A			
486			0	x	0	x	2,100	Ohara: Mis	L	3,110	10	55	0	x	0	A			
487			0	x	0	x	400	Rosclaire: Mis	L	3,130	7	10	0	x	0	A			
488			0	x	0	x	2,100	McClosky: Mis	L	3,150	7	52	1	x	0	A			
489			0	1	0	13	120	Silurian: Sil	L	2,000	7	131	0	0	1	MU	Ord	2,800	
490	Decatur: Macon	1953	0	13	0	13	20	Silurian: Sil	L	2,200	10	6	0	0	0	0	Ord	2,800	
491	Decatur North: Macon ⁵⁴	1954	0	13	0	13	20	Aux Vases: Mis	L	2,810	20	2	0	0	0	0	0	2,240	
492	Deering City: Franklin	1957	0	70	0	527	400	Aux Vases: Mis	S	2,705	11	20	2	0	0	2	x	Mis	2,875
493	Divide: Jefferson	1943	0	x	0	x	20	Ohara: Mis ⁵⁵	L	2,705	11	20	6	0	14	A	Mis	2,591	
494			0	x	0	x	20	Ohara: Mis ⁵⁵	L			0	0	0	0	AC			

[illegible]

730	Hunt City: Jasper ⁴⁰	1945	0	731	0	x	0	0	x	110	Cypress: Mis	S	1,080	5	12	0	0	0	x	
731	Hunt City East: Jasper ⁴¹	1952	0	732	0	0	0	0	1	80	Sittum: Sil	L	2,585	10	4	3	0	0	0	Mis
733	Hunt City South: Jasper	1947	0	734	0	4	0	0	20	Rosclaire: Mis	L	2,540	10	1	0	0	0	0	0	Mis
735	Ina: Jefferson ⁴²	1938	0	736	0	45	0	0	34	Fredonia: Mis	L	1,845	7	1	0	0	0	0	0	Mis
737			0	738	0	x	0	0	60	McClosky: Mis	L	2,445	7	14	11	1	1	1	A	Mis
739			0	739	0	x	0	0	x	20	Renault: Mis	S	2,725	14	2	1	1	0	0	
740			0	740	0	x	0	0	x	20	Rosclaire: Mis	L	2,775	10	1	1	1	0	0	A
741	Ina North: Jefferson	1949	0	741	0	x	0	0	x	20	McClosky: Mis	L	2,775	10	1	1	0	0	0	A
742	Inclose: Edgar, Clark ³	1941	0	742	0	0	0	0	x	60	St. Louis: Mis	L	3,000	4	7	3	0	0	0	AC
743	Ingraham: Clay ⁴³	1942	129	743	0	144	0	0	1	20	Salem: Mis	L	3,210	9	3	3	0	0	0	A
744			0	744	0	x	0	0	x	20	McClosky: Mis	L	2,940	4	1	0	0	0	0	0 x
745			129	745	0	692	129	0	1	20	McClosky: Mis	S	345	8	1	0	0	0	0	0 x
746			0	746	0	x	0	0	x	10	Isabel: Pen	L	2,915	15	33	0	0	0	0	27
747			575	747	0	1,415	2,701	0	x	620	Aux Vases: Mis ⁴⁴	S	3,000	7	28	0	0	0	0	4
748			0	748	0	x	0	0	x	100	McClosky: Mis	L	3,075	8	5	0	0	0	0	27
749	Inman East Consolidated: Gallatin	1940	0	749	0	x	0	0	x	3,570	McClosky: Mis	S	780	10	360	5	1	328	A	Mis
750			0	750	0	x	0	0	x	40	Pennsylvanian: Pen	S	1,450	4	4	0	0	0	0	AF
751			0	751	0	x	0	0	x	40	Pennsylvanian: Pen	S	1,690	10	1	0	0	0	0	AF
752			0	752	0	x	0	0	x	50	Degonia: Mis	S	1,725	8	1	0	0	0	0	AF
753			0	753	0	x	0	0	x	60	Cloze: Mis	S	1,840	13	1	0	0	0	0	AF
754			x	754	0	x	x	x	x	50	Palestine: Mis	S	2,080	18	36	0	0	0	0	AF
755			x	755	0	x	x	x	x	570	Waltersburg: Mis	S	1,980	13	127	0	1	0	0	AF
756			x	756	0	x	x	x	x	1,520	Tar Springs: Mis	S	2,080	18	9	0	0	0	0	AF
757			0	757	0	x	x	x	x	220	Hardinsburg: Mis	S	2,135	10	103	0	0	0	0	AF
758			0	758	0	x	0	0	x	1,450	Cypress: Mis	S	2,390	14	103	0	0	0	0	AF
759			0	759	0	x	0	0	x	240	Aux Vases: Mis	L	2,715	8	24	3	0	0	0	AF
760			0	760	0	x	0	0	x	20	Ohara: Mis	L	2,790	7	1	0	0	0	0	AF
761			0	761	0	x	0	0	x	20	Rosclaire: Mis	L	2,800	8	4	0	0	0	0	AF
762			0	762	0	x	0	0	x	140	McClosky: Mis	L	2,960	10	1	0	0	0	0	AF
763	Inman West Consolidated: Gallatin	1940	x	763	0	465	x	0	4,384	1	St. Louis: Mis	L	2,960	10	45	0	0	0	0	
764			0	764	0	x	0	0	x	3,100	Bethel: Mis	S	925	8	31	4	235	T	Mis	
765			0	765	0	x	0	0	x	40	Pennsylvanian: Pen	S	1,630	5	274	4	0	0	0	NL
766			x	766	0	x	0	0	x	20	Pennsylvanian: Pen	S	1,750	12	6	0	0	0	0	NL
767			x	767	0	x	0	0	x	60	Bethel: Pen	S	1,765	13	3	0	0	0	0	NL
768			x	768	0	x	0	0	x	40	Palestine: Mis	S	2,080	10	8	0	0	0	0	NL
769			x	769	0	x	0	0	x	100	Waltersburg: Mis	S	2,140	8	50	2	1	0	0	TL
770			x	770	0	x	0	0	x	800	Tar Springs: Mis	S	2,300	10	8	0	0	0	0	TL
771			x	771	0	x	0	0	x	220	Hardinsburg: Mis	S	2,475	10	91	11	2	0	0	TL
772			0	772	0	x	0	0	x	1,360	Cypress: Mis	S	2,610	30	1	1	0	0	0	TL
773			0	773	0	x	0	0	x	10	Paint Creek: Mis	S	2,775	7	1	0	0	0	0	T
774			0	774	0	x	0	0	x	30	Renault: Mis	L	2,775	7	1	0	0	0	0	T
775			0	775	0	x	0	0	x	520	Aux Vases: Mis	L	2,790	15	37	3	2	0	0	TL
776			0	776	0	x	0	0	x	80	Ohara: Mis	L	2,815	12	1	0	0	0	0	TC
777			0	777	0	x	0	0	x	40	Rosclaire: Mis	L	2,815	8	1	0	0	0	0	TC
778			0	778	0	x	0	0	x	280	McClosky: Mis	L	2,940	6	7	0	0	0	0	TC
779	Iola Central: Clay ⁴⁴	1954	0	779	0	0	0	0	1	10	Bethel: Mis	S	2,420	5	55	6	0	0	0	0 x
780	Iola Consolidated: Clay, Effingham ⁴⁵	1939	8	780	0	405	8	0	9,760	3,200	Tar Springs: Mis	S	1,899	9	256	10	3	199	A	Dev
781			0	781	0	x	0	0	x	10	Tar Springs: Mis ⁴⁶	S	2,125	15	0	0	0	0	0	AL
782			0	782	0	x	0	0	x	470	Cypress: Mis	S	2,255	10	27	0	0	0	0	A
783			0	783	0	x	0	0	x	30	Paint Creek: Mis ⁴⁶	S	2,290	12	29	0	0	0	0	AL
784			0	784	0	x	0	0	x	820	Bethel: Mis	L	2,320	x	0	0	0	0	0	AC
785			x	785	0	x	0	0	x	10	Renault: Mis ⁴⁶	L	2,320	x	0	0	0	0	0	AC
786			x	786	0	x	x	0	x	1,570	Aux Vases: Mis	LS	2,325	10	93	6	1	0	0	A
787			x	787	0	x	x	0	x	900	Rosclaire: Mis	OL	2,400	7	22	0	2	0	0	A
788			0	788	0	x	0	0	x	820	McClosky: Mis	OL	2,425	10	58	4	0	0	0	A
789	Iola South: Clay	1947	0	789	0	10	0	0	202	200	Bethel: Mis	S	2,490	10	9	0	0	12	A	Dev
790			0	790	0	x	0	0	x	120	Bethel: Mis	S	2,490	10	9	0	0	0	0	AL
791			0	791	0	x	0	0	x	200	Bethel: Mis	S	2,490	10	9	0	0	0	0	AL

854	Keensburg East:	Wabash ⁸⁷	1939	0	0	0	0	0	0	9	120	Obara: Mis McClosky: Mis	L 2,705 L 2,710	10 6	3	0	0	0	Mis	2,802
855				0	0	0	0	0	0	x	80				1	0	0	MC		
856				0	0	0	0	0	0	509	230				18	0	2	MC		
857	Keensburg South:	Wabash	1944	x	21	x	x	x	0	x	60	Pennsylvanian: Mis	S 1,145	15	6	0	0	AL	Mis	
858				0	x	x	x	x	0	x	130	Cypress: Mis	S 2,385	9	11	0	0	AL		
859				x	1	0	0	0	0	66	720	Obara: Mis	L 2,715	10	1	0	0	AC		
860	Keeneville:	Wayne	1945	89	123	x	306	1,678	272	x	230	Aux Vases: Mis	S 2,060	20	53	0	0	AC	Mis	
861				0	0	x	0	x	0	x	80	Obara: Mis	S 3,050	8	2	0	0	AL		
862				0	863	x	0	x	0	x	20	Rosciare: Mis	L 3,060	10	1	0	0	AC		
863				0	864	x	0	x	0	x	400	McClosky: Mis	L 3,100	7	23	0	0	AC		
865				31	x	x	34													
866																				
867	Keeneville East:	Wayne	1951	0	5	0	0	53	0	60	McClosky: Mis	L 3,140	10	3	0	0	3 x Mis	3,220		
868	Kell: Jefferson ⁸⁸		1942	0	0	0	0	3	0	40	McClosky: Mis	L 2,625	6	1	0	0	0 A Mis	2,720		
869	Kenner: Clay		1942	1	41	1	0	947	0	630				49	3	0	43 A Mis	3,083		
870				0	870	0	x	x	x	10	Tar Springs: Mis	S 2,200	7	1	0	0	AL			
871				1	871	x	x	x	0	590	Bethel: Mis	S 2,690	10	42	3	0	A			
872				0	872	x	x	x	0	40	Aux Vases: Mis	S 2,835	9	3	0	0	AL			
873				0	873	x	x	x	0	20	Rosciare: Mis	L 2,875	5	1	0	0	AC			
874				0	874	0	0	x	0	20	McClosky: Mis	L 2,930	7	1	0	0	AC			
875																				
876	Kenner North:	Clay	1947	0	16	0	0	806	0	300				32	0	0	27 A Mis	3,076		
877				0	877	x	0	x	0	280	Bethel: Mis	S 2,755	8	0	0	0	A			
878				0	878	x	0	x	0	120	McClosky: Mis	L 2,970	6	5	0	0	AC			
879	Kenner South:	Clay ⁸⁹	1950	0	0	0	0	x	0	20	McClosky: Mis	L 2,870	10	1	0	0	0 AC Mis	3,000		
880	Kenner West:	Clay	1947	58	89	277	1,724	x	0	310				30	0	0	25 A Dev	4,800		
881				x	x	x	x	x	x	300	Cypress: Mis	S 2,600	26	14	0	0	A			
882				x	x	x	x	x	x	200	Bethel: Mis	S 2,705	9	2	0	0	A			
883				0	883	x	0	x	0	40	McClosky: Mis ⁸⁸	L 2,870	4	0	0	0	A			
884														14	0	0				
885	Keyesport: Clinton		1949	0	21	0	0	105	0	150	Bethel: Mis	S 1,180	8	14	0	0	9 AL Mis	1,358		
886	Kincaid: Christian		1955	0	212	0	656	0	0	100	Hibbard: Dev	DS 1,780	19	10	3	0	10 MU Dev	1,804		
887	Kincaid South:	Christian	1955	0	743	0	1,628	0	0	600	Hibbard: Dev	DS 1,815	12	50	35	0	50 MU Dev	1,855		
888	King: Christian		1942	0	129	0	2,548	0	0	1,100				99	0	4	76 A Dev	4,759		
889	King: Jefferson			0	889	x	x	x	x	1,020	Aux Vases: Mis	S 2,725	15	81	0	0	AL			
890				0	890	x	0	x	0	160	Obara: Mis	L 2,765	10	1	0	0	AC			
891				0	891	x	0	x	0	140	Rosciare: Mis	LS 2,815	10	4	0	0	AC			
892				0	892	x	0	x	0	120	McClosky: Mis	L 2,840	5	2	0	0	AC			
893														3	0	0				
894	Kimmundy: Marion		1950	0	1	0	0	21	0	40				9	0	0	2 A Mis	2,479		
895				0	894	0	0	21	0	20	Bethel: Mis	S 1,915	3	2	0	0	A			
896				0	895	0	0	0	0	20	Salem: Mis	L 2,430	7	1	0	0	A			
897	Kimmundy North:	Marion ⁹⁰	1953	0	0	0	0	0	0	10	Bethel: Mis	S 2,040	6	1	0	0	0 x A Mis	2,301		
898	LaCledre: Fayette		1943	0	1	0	0	5	0	30	Bethel: Mis	S 2,335	15	4	0	0	2 A Mis	2,608		
899	Lakewood: Shelby		1941	0	8	0	0	18	0	130				12	0	0	11 A Mis	1,794		
900				0	899	x	0	241	0	80	Bethel: Mis	S 1,690	7	7	0	0	AL			
901				0	900	x	0	x	0	50	Aux Vases: Mis	S 1,720	8	5	0	0	AL			
902	Lancaster: Wabash, Lawrence		1940	0	901	0	0	2,732	0	1,400				103	1	0	61 A Mis	2,908		
903				0	902	0	0	x	0	10	Point Creek: Mis	S 2,530	5	1	0	0	AL			
904				0	903	x	0	x	0	880	Bethel: Mis	S 2,540	14	70	1	0	AL			
905				0	904	x	0	x	0	40	Obara: Mis	L 2,670	10	1	0	0	AC			
906				0	905	x	0	x	0	500	McClosky: Mis	L 2,690	7	30	0	0	AC			
907				0	906	x	0	x	0											
908	Lancaster Central:	Wabash	1946	0	907	0	0	365	0	300				14	0	0	5 M Mis	2,888		
909				0	908	0	0	x	0	100	Obara: Mis	L 2,750	7	2	0	0	MC			
910				0	909	x	0	x	0	260	Rosciare: Mis	L 2,810	7	8	0	0	MC			
911				0	910	x	0	x	0	40	McClosky: Mis ⁸⁸	L 2,815	8	0	0	0	MC			
912				0	911	0	0	1	0					4	0	0				
913	Lancaster East:	Wabash	1944	0	2	0	0	39	0	50	Biehl: Pen	S 1,745	10	3	0	0	3 M Mis	2,750		
914				0	912	0	0	19	0	30				6	1	0	ML			
915				0	914	0	0	20	0	20	Rosciare: Mis	L 2,660				0	MC			

TABLE 11.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.)			Total proved area (acres)	Producing formation			Number of wells				Structure ^e	Deepest zone tested			
			During 1957		Secondary recovery		Total	Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thick-ness (ft.)	Completed to end of 1957	1957		Name	Depth of hole (ft.)		
			Secondary recovery	Total									Aban-doned				Produc-ing end of year	
916	Lancaster South: Wabash	1946	9	22	26	257	110					13	0	0	11	M	Mis	2,817
917			9	22	26	241	70	Bethel: Mis	S	2,520	6	11	0	0	0	ML		
918			0	0	0	.5	20	Ohara: Mis	L	2,670	12	1	0	0	0	MC		
919			0	0	0	16	20	McClosky: Mis	L	2,720	12	1	0	0	0			
920	Lawrence West: Lawrence	1952	0	25	0	375	270					25	0	0	23	x	Mis	2,324
921			0	x	0	x	10	Paint Creek: Mis ^a	S	2,040	4	0	0	0	0	x		
922			0	x	0	x	240	Bethel: Mis	S	2,050	15	21	0	0	0	x		
923			0	.5	0	3	10	Aux Vases: Mis	S	2,110	8	1	0	0	0	x		
924			0	x	0	x	40	McClosky: Mis	L	2,225	11	2	0	0	0	x		
925																		
926	Lexington: Wabash	1947	0	5	0	375	200					11	0	0	3	A	Mis	3,031
927			0	1	0	10	10	Cypress: Mis	S	2,585	10	1	0	0	1	AL		
928			0	4	0	364	200	McClosky: Mis	L	2,970	8	10	0	0	1	AC		
929	Lexington North: Wabash	1951	0	.5	0	6	40	McClosky: Mis	L	2,915	4	2	0	0	1	MC	Mis	3,045
930	Lillyville: Cumberland, Effingham	1946	0	9	0	340	160	McClosky: Mis	L	2,425	10	8	0	0	8	A	Dev	4,000
931	Livingston: Madison	1948	18	36	235	413	390	Pennsylvanian: Pen	S	535	15	50	0	2	37	ML	Ord	2,378
932	Livingston South: Madison ^s	1950	0	13	0	147	330	Pennsylvanian: Pen	S	530	7	37	1	3	26	ML	Mis	845
933	Locust Grove: Wayne	1951	0	15	0	133	120		S				2	0	8	ML	Mis	3,420
934			0	x	0	x	80	Aux Vases: Mis	S	3,215	10	7	2	0	0	x		
935			0	x	0	x	40	Ohara: Mis	L	3,240	4	1	0	0	0	x		
936			0	x	0	x	20	McClosky: Mis ^a	L	3,280	6	0	0	0	0	x		
937												1	0	0	0			
938	Locust Grove South: Wayne	1953	0	2	0	13	20	Rosiclar: Mis	L	3,300	10	1	0	0	0	1	Mis	3,394
939	Long Branch: Saline, Hamilton	1950	0	34	0	190	120		S			12	1	0	9	A	Mis	3,389
940			0	9	0	82	20	Palestine: Mis	S	2,070	8	2	0	0	0	AL		
941			0	x	0	x	30	Cypress: Mis	S	2,745	13	2	0	0	0	AL		
942			0	x	0	x	60	Aux Vases: Mis	S	3,095	9	5	1	0	0	AL		
943			0	x	0	x	40	McClosky: Mis	L	3,220	5	2	0	0	0	AC		
944									S			1	0	0	0			
945	Long Branch South: Saline	1955	0	2	0	9	10	Cypress: Mis	S	2,660	8	1	0	0	0	1	Mis	3,210
946	Louden: Fayette, Effingham ^s	1937 10.697	x	x	x	23,000	23,200		S			2,186	6	17	1,970	A	St. Peter	4,680
947			x	x	x	41,704	41,704	Cypress: Mis	S	1,500	30	1,205	2	x	x	A		
948			x	x	x	23,000	23,000	Paint Creek: Mis	S	1,540	15	175	1	x	x	A		
949			x	x	x	9,000	9,000	Bethel: Mis	S	1,550	10	428	0	x	x	A		
950			0	x	0	x	60	Aux Vases: Mis	S	1,600	6	1	0	0	0	AL		
951			0	x	0	x	20	McClosky: Mis	L	1,785	4	1	0	0	1	AL		
952			0	x	0	x	30	Carper: Mis	S	2,830	9	1	1	0	0	AL		
953			416	16,629	0	x	2,800	Devonian: Dev	D	3,000	15	85	0	0	0	A		
954			0	x	0	x	20	Trenton: Ord ^a	L	3,905	12	0	0	0	0	A		
955									S			290	2	x	0			
956	Louisville North: Clay ^{a1}	1953	0	0	0	2	20	Aux Vases: Mis	S	2,755	10	2	0	0	0	0	Mis	2,977
957	Lynchburg: Jefferson	1951	0	11	0	222	40	McClosky: Mis	L	3,045	8	2	0	0	0	2	AC	3,169
958	McKinley: Washington	1940	0	81	0	508	230		S			22	5	0	12	D	Ord	3,983
959			0	x	0	x	70	Bethel: Mis	S	1,000	5	10	3	0	0	R		
960			0	x	0	x	200	Silurian: Sil	L	2,240	40	12	2	0	0			
961	Maple Grove Consolidated: Edwards, Wayne	1943	18	112	111	3,737	2,250		S			103	0	2	72	A	Mis	3,385
962			7	x	7	x	290	Aux Vases: Mis	S	3,145	15	20	0	2	2	A		

OIL PRODUCTION

963			0	0	x	0	0	x	80	Obara: Mis	L	3,230	3	2	0	0	AC
964			0	0	x	0	0	x	20	Rosclaire: Mis ^{s3}	L	3,250	1	0	0	0	AC
965			11	104	x	x	x	x	2,040	McClosky: Mis	L	3,260	6	76	0	0	A
966																	
967	Maple Grove South:	Edwards ^{s2}	0	0	0	0	0	9	20	McClosky: Mis	L	3,250	10	1	0	0	0 MC Mis
968	Marcoe: Jefferson ^{s6}		0	0	0	0	13	40	McClosky: Mis	L	2,745	15	21	0	0	0	0 MC Mis
969	Marine: Madison		0	233	0	0	9,801	3,100	Devonian-Silurian	L	1,700	5	146	0	0	135 R Ord	
970	Marion: Williamson ^{s4}		0	0	0	0	.5	10	Aux Vases: Mis	L	2,385	5	1	0	0	0	0 X Mis
971	Markham City: Jefferson		1	25	2	1,269		760	Sta. Genevieve: Mis	L	3,070	10	19	0	0	11 A Mis	
972	Markham City North: Jefferson,																
973	Wayne		0	26	0	1,001		500					18	0	0	9 A Mis	
974			0	x	x	0	0	80	Aux Vases: Mis	S	2,950	6	4	0	0	0 A	
975			0	0	0	0	x	500	McClosky: Mis	L	3,075	8	14	0	0	0 AC	
976	Markham City West: Jefferson		50	82	80	1,651		600					35	1	0	30 A Mis	
977			x	x	x	x	x	320	Aux Vases: Mis	S	2,905	15	16	0	0	0 AL	
978			x	x	x	x	x	360	McClosky: Mis	L	3,035	7	16	1	0	0 AC	
979																	
980	Mason North: Effingham		0	14	0	0	191	120	Bethel: Mis	S	2,290	13	7	0	0	10 A Mis	
981			0	x	x	0	x	100	Bethel: Mis	S	2,290	13	7	0	0	0 AL	
982			0	x	x	0	x	10	Aux Vases: Mis ^{s3}	S	2,355	5	0	0	0	0 AL	
983			0	x	x	0	x	60	Rosclaire: Mis	L	2,390	18	2	0	0	0 AC	
984			0	x	x	0	x	20	McClosky: Mis ^{s3}	L	2,475	5	0	0	0	0 AC	
985	Massilon: Wayne, Edwards ^{s5}		0	0	0	0	91	120	Obara: Mis	L	3,255	6	3	0	0	0 MC Mis	
986	Massilon South: Edwards ^{s6}		0	0	0	0	5	20	Obara: Mis	L	3,315	9	1	0	0	0 MC Mis	
987	Mattoon: Coles		x	595	x	x	12,843	5,320	Cypress: Mis	S	1,750	13	97	1	0	0 382 A St. Peter	
988			x	x	x	x	x	2,040					446	0	0	0 A	
989			0	x	x	x	x	200	Aux Vases: Mis	S	1,900	15	5	0	0	0 AL	
990			x	x	x	0	x	3,900	Rosclaire: Mis	S	1,950	12	234	8	0	0 A	
991			0	0	0	0	x	20	McClosky: Mis	L	2,010	5	1	0	0	0 AC	
992			0	x	x	0	x	10	Carper: Mis	S	2,950	10	1	0	0	0 A	
993													108	1	0	0	
994	Maunie East: White ^{s7}		0	8	0	0	34	60	Aux Vases: Mis	S	2,870	20	5	0	1	3 AF Mis	
995	Maunie North Consolidated: White ^{s8}		0	290	0	0	2,641	1,860	Pennsylvanian: Pen	S	1,320	20	1	0	0	141 A Mis	
996			0	0	x	0	x	100	Watersburg: Mis	S	2,305	12	9	0	0	0 AL	
997			0	x	x	0	x	110	Tar Springs: Mis	S	2,350	10	8	0	0	0 AL	
998			0	0	0	0	x	10	Hardinsburg: Mis ^{s3}	S	2,565	10	0	0	0	0 AL	
999			0	0	0	0	x	40	Paint Creek: Mis	S	2,830	13	2	0	0	0 AL	
1000			0	0	0	0	x	400	Bethel: Mis	S	2,820	13	24	1	0	0 AL	
1001			0	0	x	0	x	10	Renault: Mis	L	2,935	12	1	0	0	0 AC	
1002			0	0	x	0	x	880	Aux Vases: Mis	L	2,935	13	70	2	3	0 AC	
1003			0	0	x	0	x	160	Obara: Mis	L	2,995	4	5	0	0	0 AC	
1004			0	0	x	0	x	340	Rosclaire: Mis	L	3,025	6	9	0	0	0 AC	
1005			0	0	x	0	x	380	McClosky: Mis	L	3,035	10	12	0	0	0 AC	
1006			0	0	x	0	x						20	0	0	0	
1007													141	0	0	0	
1008	Maunie South Consolidated: White ^{s9}		115	205	2,299	5,721		1,500	Bridgeport: Pen	S	1,400	7	7	0	0	93 A Mis	
1009			0	0	0	0	x	70	Degonia: Mis	S	1,900	10	6	0	0	0 AL	
1010			0	0	0	0	x	480	Palestine: Mis	S	2,010	17	39	0	0	0 AL	
1011			113	0	803	x	x	20	Watersburg: Mis	S	2,210	19	2	0	0	0 AL	
1012			0	0	0	0	x	520	Tar Springs: Mis	S	2,270	16	43	0	4	0 AF	
1013			2	0	1,496	x	x	270	Cypress: Mis	S	2,590	10	23	0	0	0 AL	
1014			0	0	0	0	x	10	Bethel: Mis ^{s3}	S	2,735	x	0	0	0	0 AL	
1015			0	0	0	0	x	120	Aux Vases: Mis	S	2,845	12	10	0	0	0 AL	
1016			0	0	0	0	x	20	Rosclaire: Mis ^{s3}	L	2,900	8	0	0	0	0 AC	
1017			0	0	0	0	x	40	McClosky: Mis	L	2,920	6	1	0	0	0 AC	
1018			0	0	0	0	x						10	0	0	1	
1019													8	7	0	0	
1020	Mayberry: Wayne		0	4	0	0	319	240	McClosky: Mis	L	3,350	8	7	0	0	2 AC Dev	
1021	Mayberry North: Wayne ^{s00}		0	0	0	0	1	20	McClosky: Mis	L	3,330	2	1	0	0	0 x Mis	
1022	Melrose: Clark		0	0	0	0	x	100	Isabel: Pen	S	840	10	1	0	4	0 9 x Pen	
1023	Melrose South: Clark		0	0	0	0	x	10	Isabel: Pen	S	865	7	1	0	0	0 x Pen	
1024																	
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TABLE 11.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.)				Total proved area (acres)	Producing formation				Number of wells				Structure ^e	Deepest zone tested				
			During 1957		To end of 1957			Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thickness (ft.)	Completed to end of 1957	1957		Name		Depth of hole (ft.)				
			Secondary recovery	Total	Secondary recovery	Total							Completed	Abandoned				Producing end of year			
1146	Omaha: Gallatin ⁵	1940	0	x	0	x	700	Rosiclare: Mis	L	3,100	4	15	0	x	MC	Mis	2,941				
1147			0	x	0	x	540	McClosky: Mis	L	3,115	3	16	0	x	MC						
1148			86	104	2,209	2,711	720	Jake Creek: Pen	S	385	20	55	0	0	45						
1149			0	x	0	x	210	Pennsylvanian: Pen	S	580	10	15	0	0	D						
1150			0	x	0	x	30	Biehli: Pen	S	1,335	10	4	0	0	D						
1151			0	x	0	x	60	Paestine: Mis	S	1,700	15	24	0	0	D						
1152			86	x	2,209	x	360	Tar Springs: Mis	S	1,900	15	6	0	0	D						
1153			0	x	0	x	80	Bethel: Mis ²⁸	S	2,570	14	0	0	0	D						
1154			0	x	0	x	10	Aux Vases: Mis	S	2,730	20	1	0	0	D						
1155			0	x	0	x	20	Aux Vases: Mis	S			1	0	0	D						
1156	Omaha East: Gallatin	1946	0	3	0	14	40	Cypress: Mis	S	2,530	6	3	1	1	M	Mis	3,000				
1157			0	3	0	3	10	Aux Vases: Mis	S	2,790	x	1	0	0	M						
1158			0	0	0	0	10	Aux Vases: Mis	S	2,855	8	1	0	0	M						
1159			0	5	0	11	20	Ohara: Mis	L			7	0	1	MCf						
1160			0	2	0	21	90	Cypress: Mis	S	2,535	15	5	0	1	2			N	Mis	3,035	
1161			0	2	0	16	60	Cypress: Mis	S	2,870	11	1	0	0	1			N			
1162			0	0	0	0	10	Aux Vases: Mis	S	2,865	1	1	0	0	0			NC			
1163			0	0	0	5	20	Rosiclare: Mis	L			6	0	0	4			A			
1164			Omaha West: Saline	1950	0	8	0	129	70	Cypress: Mis	S	2,600	14	4	0			0	AL	Mis	3,016
1165					0	x	0	x	50	Aux Vases: Mis ²⁸	S	2,800	30	0	0			0	AL		
1166	0	x			0	x	10	Aux Vases: Mis	S	2,910	8	1	0	0	AC						
1167	0	0			0	1	20	McClosky: Mis	L			1	0	0	0						
1168	Omaha: Marion ¹⁰⁹ Orchardville: Wayne	1946 1950	0	0	0	5	40	McClosky: Mis	L	2,490	10	2	0	0	D	Mis	2,584				
1169			0	9	0	97	100	Aux Vases: Mis	S	2,800	16	5	0	1	7			A	Mis	3,000	
1170			0	1	0	4	20	Ohara: Mis	L	2,880	3	1	0	0	1			AL			
1171			0	1	0	22	40	McClosky: Mis	L	2,905	5	2	0	0	1			AC			
1172	Orchardville North: Wayne Oskaloosa: Clay	1956 1950	0	.5	3	5	10	Paint Creek: Mis	S	2,655	6	1	0	0	1	Mis	3,020				
1173			121	166	746	1,604	380	Bethel: Mis	S	2,595	15	36	0	0	34			Mis	2,961		
1174			121	166	746	1,604	360	McClosky: Mis	L	2,755	5	3	0	0	34					Mis	3,050
1175			0	0	0	35	40	Aux Vases: Mis	S	2,820	5	3	0	0	0						
1176	Oskaloosa East: Clay ¹¹⁰	1947	0	0	0	7	20	Aux Vases: Mis	S	2,895	4	1	0	0	AL	Mis	2,883				
1177			0	0	0	28	20	McClosky: Mis	L	2,770	4	3	0	0	2			AC	Dev		
1178			0	2	0	22	60	McClosky: Mis	L	2,770	4	3	0	0	4			A		2,016	
1179			0	8	0	54	50	Bethel: Mis	S	1,470	8	4	0	0	3						A
1180	Oskaloosa South: Clay	1951	0	.5	0	8	30	Golconda: Mis	L	705	12	3	0	0	A	Mis	2,742				
1181			0	1	0	9	10	Bethel: Mis	S	865	12	1	0	0	0				x		
1182			0	1	0	6	30	Cypress: Mis	S	2,250	x	2	0	1	0			x		2,604	
1183			0	0	0	0	10	Cypress: Mis ²⁸	S	2,250	x	0	0	0	0						x
1184	Pankeyville: Saline ¹¹¹ Pankeyville East: Saline ¹¹²	1956 1956	0	0	0	0	10	Bethel: Mis ²⁸	S	2,360	13	1	0	0	x	2,604					
1185			0	0	0	0	10					0	0	0			x		2,604		
1186			0	0	0	0	10					0	0	0				x		2,604	
1187			0	0	0	0	10					0	0	0							x
1188	Pankeyville: Saline ¹¹¹ Pankeyville East: Saline ¹¹²	1956 1956	0	1	0	6	30	Cypress: Mis	S	2,250	x	2	0	1	x	2,604					
1189			0	0	0	0	10					0	0	0			x		2,604		
1190			0	0	0	0	10					0	0	0				x		2,604	
1191			0	0	0	0	10					0	0	0							x
1192	0	0	0	0	10					0	0	0	x	2,604							

OIL PRODUCTION

61

1193 Parkersburg Consolidated: Richland, Edwards	1941	x	x	194	x	9,719	6,300	Waltersburg: Mis	S	2,430	10	277	3	9	154	A	Mis	3,333	
1194	x	x	x	x	x	x	90	Cypress: Mis	S	2,830	12	8	0	1	1	A			
1195	x	x	x	x	x	x	160	Paint Creek: Mis	S	2,955	17	2	0	x	x	A			
1196	x	x	x	x	x	x	70	Bethel: Mis	S	2,930	12	4	0	x	x	A			
1197	x	x	x	x	x	x	140	Aux Vases: Mis	S	3,070	20	1	0	0	0	A			
1198	x	x	x	x	x	x	10	Ohara: Mis	L	3,100	10	2	0	0	0	A			
1199	x	x	x	x	x	x	x	Rosclaire: Mis	L	3,150	10	42	0	x	x	A			
1200	x	x	x	x	x	x	5,000	McClosky: Mis	OL	3,175	10	184	2	x	x	A			
1201	x	x	x	x	x	x						25	0	x	x			3,187	
1202							80	Pennsylvanian: Pen	S	1,400	10	6	0	0	6	x	Mis		
1203 Parkersburg South: Edwards	1948	0	2	0	45	58	60	Bethel: Mis	S	2,815	5	2	0	0	0	0			
1204	0	1204	0	1	0	43	20												
1205	0	1205	0	0	194	194	240	Ohara: Mis	L	3,220	5	10	0	1	5	A	Mis	3,331	
1206 Parkersburg West: Richland, Edwards	1943	0	1206	0	0	0	200	McClosky: Mis	L	3,260	6	9	0	0	0	AC			
1207	0	1207	0	0	0	0	x							1	0	AC			
1208	0	1208	0	9	0	0	200	McClosky: Mis	L	3,005	5	57	0	0	39	A	Mis	3,140	
1945	1	51	1	1	2,204	2,204	1,060	Rosclaire: Mis	L	3,020	10	55	0	0	0	AC			
1210	0	1210	0	0	0	x	40	McClosky: Mis	L					0	0				
1211	1	51	1	1	0	x	1,060							0	0				
1212														0	0				
1213	1948	0	13	0	96	96	110	Cypress: Mis	S	2,665	15	7	0	0	5	A	Mis	3,692	
1214	0	1214	0	8	0	56	70	Rosclaire: Mis	L	3,025	6	1	0	0	0	AL			
1215	0	1215	0	5	0	19	20	McClosky: Mis	L	3,030	8	1	0	0	0	AC			
1216	0	1216	0	0	0	21	180	Ste. Genevieve: Mis	L	3,030	5	10	1	1	6	AC	Mis	3,130	
1217	1954	93	267	7,689	11,962	11,962	1,700	Cypress: Mis ⁸³	S	1,280	10	208	25	6	116	D	Ord	4,056	
1218	1218	54	220	x	53	x	60	Bethel: Mis	S	1,410	27	165	1	5	5	D			
1219	0	1219	0	x	6,296	x	950	Rosclaire: Mis	S	1,550	9	8	0	0	0	D			
1220	0	1220	0	x	1,340	x	20	Geneva: Dev	D	2,835	10	1	0	1	0	D			
1221	0	1221	0	x	0	x	700	Trenton: Ord	L	3,950	25	2	0	0	0	D			
1222	0	1222	0	0	0	0								0	0				
1223	0	1223	0	66	0	4,147	600	Cypress: Mis	S	1,340	16	64	0	1	49	D	Ord	4,178	
1224	1941	0	1225	x	0	x	500	Bethel: Mis	S	1,465	10	5	0	0	0	D			
1225		0	1226	x	0	x	60	McClosky: Mis	L	1,635	8	3	0	0	0	D			
1226		0	1227	x	0	x	80	Geneva: Dev	D	2,950	30	2	0	1	0	R			
1227		0	1228	x	0	x	40	Cypress: Mis	S	1,350	10	34	6	0	33	A	Mis	1,728	
1229		0	1229	x	0	344	380	Bethel: Mis	S	1,380	6	17	0	0	13	A	Mis	1,735	
1230	1953	0	1230	72	0	232	180							6	375	A	Dev	5,350	
1231	1950	0	1231	16	0	0								0	0				
1232	White, Phillipstown Consolidated: Edwards	145	875	1,700	17,068	17,068	6,000	Anvil Rock: Pen	S	795	10	473	5	6	375	A	Dev		
1233	0	1233	0	x	0	0	10	Clark-Bridgeport: Pen	S	1,350	10	1	0	0	0	Af			
1234	0	1234	0	x	0	0	x	Pennsylvanian: Pen	S	1,450	10	13	0	0	0	Af			
1235	0	1235	0	x	0	0	x	Buchanan: Pen	S	1,550	15	23	0	0	0	Af			
1236	0	1236	0	x	0	0	x	Biehl: Pen	S	1,875	15	45	0	0	0	Af			
1237	67	1237	67	x	1,451	x	470	Degonia: Mis	S	1,975	15	35	0	0	0	Af			
1238	4	1238	4	x	63	x	120	Clare: Mis	S	2,010	12	4	0	0	0	Af			
1239	49	1239	49	x	73	x	60	Palatine: Mis	S	2,050	11	1	0	0	0	Af			
1240	0	1240	0	x	0	0	60	Waltersburg: Mis	S	2,280	11	4	0	0	0	Af			
1241	0	1241	0	x	0	0	930	Tar Springs: Mis	S	2,295	15	61	0	0	0	Af			
1242	0	1242	0	0	1	x	450	Cypress: Mis	S	2,720	12	23	0	0	0	Af			
1243	24	1243	24	x	113	x	50	Paint Creek: Mis	S	2,780	9	4	0	0	0	Af			
1244	0	1244	0	x	0	0	920	Bethel: Mis	S	2,810	15	71	2	x	x	Af			
1245	1	1245	1	x	1	x	700	Aux Vases: Mis	S	2,880	15	34	1	x	x	ACf			
1246	0	1246	0	x	0	0	480	Ohara: Mis	L	3,010	10	18	1	x	x	ACf			
1247	0	1247	0	x	0	0	460	Rosclaire: Mis	L	2,960	10	15	0	0	0	ACf			
1248	0	1248	0	x	0	0	1,060	McClosky: Mis	L	3,000	6	44	0	0	0	ACf			
1249	0	1249	0	x	0	0						68	1	1	1	x			
1250	0	1250	0	x	0	0	20	Tar Springs: Mis	S	2,345	10	3	1	0	1	M	Mis	3,161	
1251	1951	0	1251	x	0	x	10							0	Mf				
1252		0	1252	x	0	x								0					

TABLE 11.—(Continued)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.)				Total proved area (acres)	Producing formation				Number of wells				Deepest zone tested		
			During 1957		To end of 1957			Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thickness (ft.)	Completed to end of 1957	1957		Structure ^c	Name	Depth of hole (ft.)	
			Secondary recovery	Total	Secondary recovery	Total							Completed	Abandoned				Producing end of year
1375			5	x	30	x	800	Aux Vases: Mis	S	2,825	13	62	6	x	x	A		
1376			0	x	0	x	280	Ohara: Mis	OL	2,900	6	6	2	x	x	A		
1377			x	x	x	x	1,600	Rosiclare: Mis	LS	2,900	8	60	4	x	x	A		
1378			x	x	x	x	1,600	McClosky: Mis	OL	2,925	8	167	5	x	x	A		
1379												63	2	x	0			
1380	Sailor Springs East: Clay ¹²³	1944	0	0	0	64	130	Cypress: Mis	S	2,695	8	11	0	0	0	D	Mis	3,168
1381			0	0	0	62	90	McClosky: Mis	L	3,020	7	2	0	0	0	D		
1382			0	0	0	4	80	Rosiclare: Mis	L	2,985	2	1	0	0	0	M	Mis	3,126
1383	Sailor Springs North: Clay ¹²⁴	1948	0	0	0	x	40	Rosiclare: Mis	L	2,985	2	1	0	0	0	MC		
1384			0	0	0	x	60	McClosky: Mis	L	3,030	2	2	0	0	0	MC		
1385			0	0	0	x						1	0	0	0			
1386																		
1387	Salem Consolidated: Marion, Jefferson	1938	4,965	5,665	26,872	258,084	14,400	Bethel: Mis	S	1,780	40	2,768	4	6	2,179	A	St. Peter	5,655
1388			3,568	x	22,396	x	x	Renaud: Mis ²⁵	S	1,825	x	599	0	0	0	A		
1389			0	x	0	x	x	Aux Vases: Mis ²⁵	S	1,825	40	154	0	0	0	A		
1390			414	x	922	x	x	Ohara: Mis	S	2,075	3	2	0	0	0	A		
1391			0	x	0	x	x	Rosiclare: Mis	LS	2,100	15	138	3	6	6	A		
1392			9	x	76	x	x	McClosky: Mis	L	2,050	17	589	1	0	0	A		
1393			903	x	3,019	x	x	St. Louis: Mis ²⁵	L	2,100	x	0	0	0	0	A		
1394			0	x	0	x	x	Salem: Mis	L	2,160	17	8	0	0	0	A		
1395			0	x	0	x	5,860	Devonian: Dev	L	3,440	40	541	0	0	0	A		
1396			71	x	458	x	2,160	Trenton: Ord	L	4,500	50	2	0	0	0	A		
1397			0	x	0	0						735	0	0	0			
1398			0	0	0	1	30	Waltersburg: Mis	S	2,420	7	3	0	0	0	A	Mis	3,303
1399	Samsville: Edwards ²⁵	1942	0	0	0	228	180	Paint Creek-Bethel: Mis	S	2,900	6	16	0	1	5	A	Mis	3,220
1400	Samsville North: Edwards	1945	1	8	6	0	20	Ohara: Mis	L	3,190	4	1	0	0	0	x	Mis	3,248
1401	Samsville Northwest: Edwards ²⁵	1955	0	0	0	0	136	Ohara: Mis	L	3,260	6	3	0	0	0	x	Mis	3,425
1402	Samsville West: Edwards	1951	0	6	0	x	x	McClosky: Mis	L	3,275	6	2	0	0	0	x		
1403			0	x	0	x	40	Rosiclare: Mis ²⁵	L	3,275	6	0	0	0	0	x		
1404			0	x	0	25	10	Cypress: Mis	S	1,420	4	1	0	0	0	x		
1405			0	0	0	245	80	Cypress: Mis	OL	955	10	1	0	0	0	x	Mis	1,560
1406	Sandoval West: Clinton	1946	0	0	0	4	20	McClosky: Mis	L	3,000	5	4	0	0	0	0	Dev	2,512
1407	Santa Fe: Clinton ¹²⁷	1944	0	0	0	5	60	McClosky: Mis	L	3,115	4	1	0	0	0	2	AC	3,150
1408	Schnell: Richland	1938	0	0	0	10	160	Rosiclare: Mis	L	3,005	4	3	0	0	0	0	AC	3,109
1409	Schnell East: Richland ¹²⁸	1954	0	0	0	10	500	McClosky: Mis	L	3,195	8	8	0	0	4	2	MC	3,330
1410	Schnell South: Clay	1951	0	0	0	24	216	McClosky: Mis	L	3,195	8	39	2	0	31	A	Dev	4,688
1411	Seminary: Richland	1945	4	7	24	1,049	20	Cypress: Mis	S	2,455	5	2	0	0	0	AL		
1412	Sesser: Franklin	1942	0	x	0	x	120	Renaud: Mis	L	2,690	10	10	0	0	0	AL		
1413			0	x	0	x	250	Aux Vases: Mis	L	2,700	10	18	2	0	0	AL		
1414			0	x	0	x	80	Rosiclare: Mis	L	2,810	10	2	0	0	0	AC		
1415			0	x	0	x	100	McClosky: Mis	L	2,840	5	2	0	0	0	AC		
1416			0	x	0	x	60	Clear Creek: Dev	L	4,360	x	3	0	0	0	AC		
1417			0	x	0	x						28	0	0	0			
1418			0	20	0	524	340											
1419																		
1420	Shattuc: Clinton	1945	0	20	0	0	0								22	A	Ord	4,078

OIL PRODUCTION

[illegible]

1483	Sumpter North: White	1952	0	47	0	252	130	Aux Vases: Mis	S	3,185	3	9	0	0	11	NL	Mis	3,425	
1484	Sumpter South: White	1948	0	31	0	177	160	Tar Springs: Mis	S	2,580	8	14	1	0	12	Af	Mis	3,430	
1485			0	x	0	x	130	Bethel: Mis ²³	S	3,025	15	9	0	0	0	Af			
1486			0	x	0	x	10	Aux Vases: Mis	S	3,260	10	3	0	0	0	Af			
1487			0	x	0	x	40	Aux Vases: Mis	S	3,165	5	2	1	0	0				
1488			0	x	0	x	150	Cypress: Mis	S	1,120	13	14	0	0	1	NL	Mis	3,336	
1489	Sumpter West: White	1952	0	1	0	14	90	Cypress: Mis	S	1,155	7	7	0	0	10	NL	Mis	1,630	
1490	Tamaroa: Perry ^s	1942	0	16	0	201	100	Cypress: Mis	S	1,100	5	1	0	0	7	x	Mis	1,200	
1491	Tamaroa South: Perry	1957	0	16	0	9	10	Cypress: Mis	S	1,100	5	1	0	0	1	x	Mis	1,600	
1492	Tamaroa West: Perry	1956	0	x	0	x	60	Ohara: Mis	L	3,055	4	3	0	0	2	x	Mis	3,227	
1493	Taylor Hill: Franklin	1949	0	5	0	44	730	Cypress: Mis	S	3,030	24	66	3	1	57	A	Mis	3,660	
1494	Thackeray: Hamilton	1944	0	88	0	2,738	660	Aux Vases: Mis	S	3,360	15	59	0	0	0	AL			
1495			0	6	0	10	x	McClosky: Mis	L	3,435	5	0	0	0	0	AC			
1496			0	x	0	x	x	McClosky: Mis	L	3,500	10	3	2	0	0	AC			
1497			0	x	0	x	x												
1498			0	x	0	x	x												
1499			0	x	0	x	x												
1500			0	0	0	285	240	McClosky: Mis	L	3,120	10	19	0	0	0	A	Mis	3,455	
1501	Thompsonville: Franklins ^{as}	1940	22	16	67	266	90	Aux Vases: Mis	S	3,150	8	9	0	0	0	8	ML	Mis	3,371
1502	Thompsonville East: Franklin	1949	267	127	302	1,726	560	Cypress: Mis	S	2,750	10	72	0	0	4	46	A	Mis	3,365
1503	Thompsonville North: Franklin	1944	0	0	0	x	20	Cypress: Mis	S	3,100	20	71	0	0	0	AL			
1504			267	127	302	x	560	Aux Vases: Mis	S	3,100	20	71	0	0	4	AL			
1505	Tiden: Randolph	1952	0	182	0	1,990	500	Silurian: Sil	L	2,160	60	24	0	0	0	24	R	Ord	3,093
1506	Toliver East: Clay	1943	0	5	0	215	90	Cypress: Mis	S	2,510	14	1	0	0	4	M	Mis	2,965	
1507			0	0	0	0	20	Rosiclare: Mis	L	2,815	6	1	0	0	0	MC			
1508			0	1	0	14	60	McClosky: Mis	OL	2,840	8	3	0	0	0	MC			
1509			0	4	0	201	70	Aux Vases: Mis	S	2,765	x	1	0	0	4	M	Mis	2,915	
1510	Toliver South: Clay	1953	0	13	0	40	60	McClosky: Mis	S	2,875	5	3	0	0	0	MC			
1511			0	4	0	17	20	McClosky: Mis	L	3,500	7	6	0	0	0	MC			
1512			0	9	0	23	60	McClosky: Mis	S	2,765	x	1	0	0	0	MC			
1513			0	0	0	88	700	Bethel: Mis	S	1,930	20	96	1	1	79	D	Ord	4,900	
1514	Tonti: Marion	1938	27	198	88	10,942	x	Aux Vases: Mis	S	2,005	30	16	0	0	0	D			
1515			27	x	0	x	x	Aux Vases: Mis	S	2,125	12	2	1	0	0	D			
1516			0	x	0	x	x	Rosiclare: Mis	LS	2,130	15	56	0	1	0	D			
1517			0	x	0	x	x	McClosky: Mis	OL	2,130	15	56	0	1	0	D			
1518			0	x	0	x	80	Devonian: Dev	L	3,500	7	6	0	0	0	R			
1519			0	x	0	x	x												
1520			0	2	0	8	20	Silurian: Sil	L	1,850	10	1	0	0	1	x	Sil	1,881	
1521	Tovey: Christian	1955	0	103	0	872	610	Trenton: Ord	S	2,845	10	42	8	0	31	A	Mis	3,462	
1522	Trumbull: White	1944	0	x	0	x	140	Cypress: Mis	S	3,170	9	9	1	0	0	A			
1523			0	x	0	x	120	Aux Vases: Mis	S	3,230	15	1	0	0	0	A			
1524			0	x	0	x	60	Ohara: Mis	L	3,270	6	3	2	0	0	AC			
1525			0	x	0	x	120	Rosiclare: Mis	L	3,290	5	12	3	0	0	AC			
1526			0	x	0	x	300	McClosky: Mis	L	3,120	x	4	1	0	0	AC			
1527			0	x	0	x	10	Aux Vases: Mis	S	3,940	x	1	0	0	1	x	Mis	3,330	
1528	Trumbull West: White	1953	0	2	0	6	20	Trenton: Ord	L	2,715	12	1	0	0	1	x	Ord	4,044	
1529	Turkey Bend: Perry	1957	0	x	0	x	20	McClosky: Mis	L	3,610	10	4	0	0	0	0	ML	Mis	2,725
1530	Valer: Franklin	1942	0	0	0	2	40	Pottsville: Pen	L	3,100	5	2	0	0	0	0	Dev	1,893	
1531	Wagoner: Montgomery	1940	0	x	0	11	20	Rosiclare: Mis	L	3,000	6	1	0	0	0	x	Mis	3,207	
1532	Wagoner: Montgomery	1946	0	0	0	2	40	Rosiclare: Mis	L	3,040	4	1	0	0	1	x	Mis	3,204	
1533	Wakefield: Jasper ¹⁹	1953	0	1	0	20	20	McClosky: Mis	L	3,040	4	1	0	0	0	x	Mis		
1534	Wakefield North: Jasper	1953	0	1	0	20	20	McClosky: Mis	L	3,040	4	1	0	0	0	x	Mis		
1535	Wakefield South: Jasper ¹⁴⁰	1955	0	0	0	0	1,740	Tar Springs: Mis	S	2,465	15	98	0	0	0	0	Mis	3,390	
1536	Walpole: Hamilton	1941	0	155	0	5,958	90	Aux Vases: Mis	S	3,070	20	6	0	0	0	AL			
1537			0	x	0	x	1,640	Aux Vases: Mis	S	3,195	7	91	0	0	0	A			
1538			0	x	0	x	20	Rosiclare: Mis	L	3,120	6	2	0	0	0	AC			
1539			0	1	0	9	20	Aux Vases: Mis	S	3,120	6	2	0	0	0	AL	Mis	3,362	
1540	Walpole South: Hamilton	1951	0	3	0	111	20	Rosiclare: Mis	S	2,460	9	4	0	0	2	AL	Mis	2,905	
1541	Waltonville: Jefferson	1943	0	3	0	106	40	Bethel: Mis	S	2,845	15	1	0	0	3	A	Mis	2,216	
1542	Wamac East: Marion	1952	0	3	0	22	20	Wilson: Pen	S	2,415	5	1	0	0	0	4	ML	Mis	2,647
1543	Watson: Effingham	1957	0	0	0	x	20	Rosiclare: Mis	L	1,020	10	1	0	0	1	x	Mis	2,647	
1544	Waverly: Morgans	1946	0	x	0	0	20	Devonian-Silurian	L	1,020	10	1	0	0	0	A	Ord	1,534	

OIL PRODUCTION

[illegible]

TABLE 11.—(Concluded)

Line No.	Pool: County	Year of discovery	Oil production (M bbls.)				Total proved area (acres)	Producing formation			Number of wells				Deepest zone tested			
			During 1957		To end of 1957			Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thickness (ft.)	Completed to end of 1957	1957			Structure ^c	Name	Depth of hole (ft.)
			Secondary recovery	Total	Secondary recovery	Total							Completed	Abandoned	Producing end of year			
1605			0	x	0	x	160	McClosky: Mis ₁	L	3,140	4	1	0	0	0	NC		
1606			0	7	0	743	280					14	0	1	4	M	Mis	3,116
1607	Zenith South: Wayne	1949	0	x	0	x	40	Ohara: Mis ^{as}	L	2,920	6	0	0	0	0	MC		
1608			0	x	0	x	280	McClosky: Mis ₁	L	2,985	7	12	0	1	1	MC		
1609												2	0	0	0			
1610																		
1611	Total of fields discovered after January 1, 1937		x 66,751		x 1,443,691	385,520						29,594	865	426	22,644			
1612	Total for Illinois		x 76,649		x 1,995,539	550,305						51,989	1,084	738	31,611			

TABLE 12.—GAS PRODUCTION IN ILLINOIS, 1957

OIL PRODUCTION

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Line No.	Pool: County	Year of discovery	Gas production Million cu. ft.		Proved area (acres)	Producing formation				Number of wells			Structure ^e	Deepest zone tested	
			During 1957	To end of 1957		Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thick- ness (ft.)	Completed to end of 1957	Aban- doned	Produc- ing end of year		Name	Depth of hole (ft.)
1	Main Consolidated: Crawford ⁶	1906	x	x	x	Robinson: Pen	S	1,000	x	x	2	0	M	St. Peter	4,654
2			x	x	x	Hardinsburg: Mis	S	1,075	40	x	2	0	ML		
3			0	0	160	Cypress: Mis	S	1,425	6	1	0	0	ML		
4	Ava-Campbell Hill: Jackson ^{6, 9}	1916	x	x	320	Cypress: Mis	S	780	18	2	0	0	0	A	Trenton
5	Ayers Gas: Bond ¹⁶	1922	0	298.7	370	Bethel: Mis	S	940	5	21	0	0	0	A	Ord
6	Gillespie-Bend (Gas): Macoupin ¹⁷	1923	0	135.8	325	Unnamed: Pen	S	540	x	4	0	0	0	A	Pen
7	Greenville Gas: Bond ¹⁸	1910	0	990.0	80	Lindley (1st & 2nd): Mis	S	925	x	4	0	0	0	A	Trenton
8	Jacksonville (Gas): Morgan ^{6, 19}	1910	0	x	1,320	Gas: Pen, Mis	S	330	5	45	0	0	0	ML	Ord
9	Pittsfield (Gas): Pike ²¹	1886	0	x	8,960	Niagan: Sil	L	265	10	68	0	0	0	A	Pre-Cam
10	Spanish Needle Creek (Gas): Macoupin ²²	1915	0	14.4	80	Unnamed: Pen	S	305	x	7	0	0	0	D	Trenton
11	Sparta: Randolph ^{6, 23}	1888	0	x	160	Cypress: Mis	S	850	7	18	0	0	0	D	Trenton
12	Stanton (Gas): Macoupin ²⁴	1916	0	1050.0	400	Unnamed: Pen	S	460	x	18	0	0	0	A	Ord
13															2,371
14	Total of fields discovered prior to January 1, 1937 ²⁷		x	2506.5	12,355					212	2	0	x		
15	Albion Consolidated: Edwards, White ⁶	1940	0	0	40	Pennsylvanian: Pen	S	1,490	6	1	0	0	0	MF	Dev
16	Beaver Creek South: Clinton, Bond ⁶	1946	0	0	240	Cypress: Mis	S	1,015	20	6	2	0	0	A	Dev
17	Beverly Gas: Adams	1957	0	0	80	Silurian: Sil	L	1,050	6	2	0	0	0	X	Sil
18	Beckemeyer Gas: Clinton ⁶	1956	0	0	80	Cypress: Mis	S	1,070	23	4	0	0	0	X	Sil
19	Boulder: Clinton ⁶	1941	0	0	320	Cypress: Dev	D	2,630	7	4	0	0	0	R	Trenton
20	Boulder East: Clinton ⁶	1957	0	0	40	Devonian: Dev	L	2,840	12	1	1	0	0	X	Sil
21	Carlinville North: Macoupin ^{6, 42}	1941	0	0	40	Pottsville: Pen	S	440	10	1	0	0	0	X	Trenton
22	Claremont: Richland ¹⁴⁴	1950	0	0	160	Rosiclare: Mis	L	3,200	5	1	0	0	0	MC	Mis
23	Cooks Mills Consolidated: Coles, Douglas ^{6, 48}	1941	0	0	800	Cypress: Mis	S	1,600	10	17	2	0	0	A	Dev
24			0	0	580	Aux Vases: Mis	S	1,800	8	9	2	0	0	A	
25			0	0	40	Rosiclare: Mis	S	1,765	15	4	0	0	0	A	
26			0	0	400					3	0	0	0	A	
27			0	0	400	Cypress: Mis	S	1,220	10	10	0	0	0	AL	Ord
28	Dubois Consolidated: Washington ⁶	1939	0	0	400	Pennsylvanian: Pen	S	300	20	2	0	0	0	M	St. Peter
29	Dudley, Edgar ⁶	1948	0	0	80	Gas: Pen	S	380	11	1	0	0	0	X	Pen
30	Dudley West Gas: Edgar	1953	0	0	40					4	0	0	0	X	Mis
31	Eldorado Consolidated: Saline ^{6, 57}	1941	631.9	1267.7	160	Palestine: Mis	S	1,920	20	2	0	0	3	AL	
32			x	x	80	Waltersburg: Mis	S	2,055	20	2	0	0	0	AL	
33			x	x	40	Tar Springs: Mis	S	2,225	17	1	0	0	0	AL	
34			0	0	120	Palestine: Mis	S	1,900	30	2	1	0	0	A	Mis
35	Eldorado East: Saline	1953	168.5	168.5	80	Tar Springs: Mis ⁵⁸	S	2,135	20	0	0	0	2	AL	
36			x	x	40					0	0	0	0	AL	
37			x	x	40					1	0	0	0	AL	
38			0	0	7,000	Edgewood: Sil	L	450	5	57	11	0	0	X	Sil
39	Fishhook Gas: Pike, Adams	1955	0	x	240	Cypress: Mis	S	380	30	6	5	0	0	X	Ord
40	Freeburg South: St. Clair ⁶	1956	x	x	400					12	1	0	0	M	Ord
41	Grandview: Edgar ⁶	1945	x	x	360	Gas: Pen	S	400	x	11	1	0	0	ML	
42			x	x	40	Salem: Mis	L	570	2	1	0	0	0	MC	
43			x	x	40	x: Mis	S	2,085	x	x	x	0	x	X	Mis
44	Harco: Saline ⁶	1954	361.5	438.4	x	Tar Springs: Mis	S	2,085	x	1	0	0	0	X	Mis
45	Harrisburg: Saline ⁶	1952	0	93.2	160					1	0	0	0	X	Mis

TABLE 12.—(Continued)

Line No.	Pool: County	Year of discovery	Gas production Million cu. ft.		Proved area (acres)	Producing formation			Number of wells				Deepest zone tested			
			During 1957	To end of 1957		Name: Age ^a	Character ^b	Depth to top (ft.)	Av. thick- ness (ft.)	Completed to end of 1957	1957		Structure ^c	Name	Depth of hole (ft.)	
											Com- pleted	Aban- doned				Produc- ing end of year
46	Herald Consolidated: White, Gallatin ⁷⁴	1939	43.6	x	1,080	S	700	25	19	0	0	0	7	A	Mis	3,394
47			x	x	360	S	1,750	18	9	0	0	0	0	AL		
48			0	x	120	S	2,240	10	3	0	0	0	0	AL		
49			0	x	480	S	2,315	6	4	0	0	0	0	A		
50			x	x	320	S	540	12	8	0	0	0	0	AL		
51	Inclose: Edgar, Clark ⁶	1941	0	0	40	S	540	12	1	0	0	0	0	0	Mis	815
52	Livingston East Gas: Madison	1951	0	0	40	S	540	12	1	0	0	0	0	0	Mis	815
53	Livingston South: Madison ⁶	1950	0	0	40	S	540	12	1	0	0	0	0	0	Mis	845
54	Louden: Fayette, Effingham ⁶	1937	0	0	1,760	S	530	2	14	0	0	0	0	0	ML	4,680
55			0	x	320	S	1,000	20	5	0	0	0	0	0	A	St. Peter
56			0	x	1,440	S	1,170	2	9	0	0	0	0	AL		
57	Mt. Olive: Montgomery ⁶	1942	0	0.9	90	S	605	6	3	1	0	0	0	AL	Pen	905
58	Omaha: Gallatin ⁶	1940	0	0	120	S	1,900	15	2	0	0	0	0	0	Mis	2,941
59	Panama: Bond, Montgomery ⁶	1940	0	x	280	S	575	30	7	0	0	0	0	0	Dev	2,016
60			0	x	160	S	865	12	4	0	0	0	0	A		
61			0	x	120	S	865	12	3	0	0	0	0	A		
62	Prentice: Morgan ⁶	1953	0	0	280	S	365	13	6	0	0	0	0	0	Ord	1,513
63	Redmon North Gas: Edgar	1955	0	0	40	S	365	13	1	0	0	0	0	0	Mis	450
64	Roland Consolidated: White, Gallatin ⁶	1940	0	0	160	S	2,150	19	1	0	0	0	0	0	Dev	5,225
65	Russellville Gas: Lawrence ⁶	1937	0	7,081.6	1,800	S	760	15	60	0	5	0	0	0	Dev	3,133
66			0	x	x	S	760	15	18	0	0	0	0	AL		
67			0	x	x	S	1,100	12	42	0	5	0	0	AL		
68	Storms Consolidated: White ⁶	1937	0	0	440	S	1,090	40	8	0	0	0	0	A	Mis	3,267
69			0	0	160	S	1,090	40	1	0	0	0	0	AL		
70			0	0	280	S	2,230	15	7	0	0	0	0	AL		
71	Tamaroa: Perry ⁶	1942	0	0	320	S	1,120	13	2	0	0	0	0	0	Mis	1,630
72	Waverly: Morgan ⁶	1946	0	0	860	S	1,120	13	7	0	0	0	0	0	Ord	2,070
73			0	0	160	S	250	13	1	0	0	0	0	AL		
74			0	0	700	S	1,000	10	6	0	0	0	0	A		
75	Westfield East: Clark ⁶	1947	0	0	40	S	400	11	1	0	0	0	0	0	ML	678
76	Total for fields discovered after January 1, 1937		1,205.5	10,321.4	18,070				271	26	6		12			
77	Total for Illinois		1,205.5	12,827.9	30,425				483	28	6		12			

PART II

WATERFLOOD OPERATIONS

ABSTRACT

During 1957 a total of 382 controlled waterflood projects were reported in operation in Illinois. Waterflood oil produced from these projects was approximately 34,300,000 barrels with an additional 1,750,000 barrels of oil estimated to have been produced from "dump" floods. This total of 36,050,000 barrels of waterflood oil represents some 47 percent of Illinois' 1957 oil production. Cumulative total of waterflood oil produced at the end of 1957 was 169,250,000 barrels.

INTRODUCTION

As in previous years, this report is the result of a joint effort by the Illinois State Geological Survey and the Illinois Secondary Recovery and Pressure Maintenance Committee of the Interstate Oil Compact Committee. The following persons were appointed to the Study Committee by Governor William G. Stratton, and their efforts were extremely helpful in obtaining the data concerning the waterflood and pressure maintenance projects operating in Illinois during 1957 that are presented in tabular form in this report:

Carl W. Sherman, *Chairman*, Illinois State Geological Survey, Urbana, Illinois

A. H. Bell, previous Chairman, Illinois State Geological Survey, Urbana, Illinois

C. E. Brehm, Box 368, Mt. Vernon, Illinois

R. G. Brown, The Texas Company, Salem, Illinois

Robert Bulla, Robinson, Illinois

C. D. Dohrer, Phillips Petroleum Company, Carmi, Illinois

James T. Dorland, Calvert Drilling Company, Olney, Illinois

R. E. Dunn, Walter Duncan Oil Properties, Mt. Vernon, Illinois

Millard H. Flood, The Ohio Oil Company, Terre Haute, Indiana

T. W. George, Box 152, Mt. Carmel, Illinois

Robert G. Jones, The Ohio Oil Company, Bridgeport, Illinois

T. F. Lawry, Mahutska Oil Company, Robinson, Illinois

R. W. Love, The Texas Company, Salem, Illinois

E. A. Milz, Shell Oil Company, Centralia, Illinois

Paul Phillippi, Forest Oil Corp., Casey, Illinois

Mark Plummer, The Pure Oil Company, Olney, Illinois

J. D. Simmons, Carter Oil Company, Mattoon, Illinois

C. E. Skiles, Skiles Oil Corp., Mt. Carmel, Illinois

W. G. Sole, Magnolia Petroleum Company, Salem, Illinois

Harry F. Swannack, Gulf Oil Corporation, Evansville, Indiana

Carl R. Temple, Sohio Petroleum Company, Centralia, Illinois

R. R. Vincent, C. L. McMahon, Inc., Evansville, Indiana

R. A. Wilson, Tide Water Associated Oil Co., Robinson, Illinois

In order to review the questionnaire that was used in previous years to collect data on water injection and pressure maintenance projects, the Study Committee met at the office of the Pure Oil Company in Olney, Illinois, on March 11, 1957. A minor change in the section dealing with types of water injected was approved. It was also agreed that the questionnaire should inquire as to whether or not the project had been curtailed — either by injection or production rate — during 1957. It is hoped that this addition will be the first step in a detailed study as to the effects of curtailment.

Such a study has been requested by the Interstate Oil Compact Commission. A copy of this request will be mailed to waterflood operators who are asked to furnish data after the Study Committee has reviewed the preliminary information and

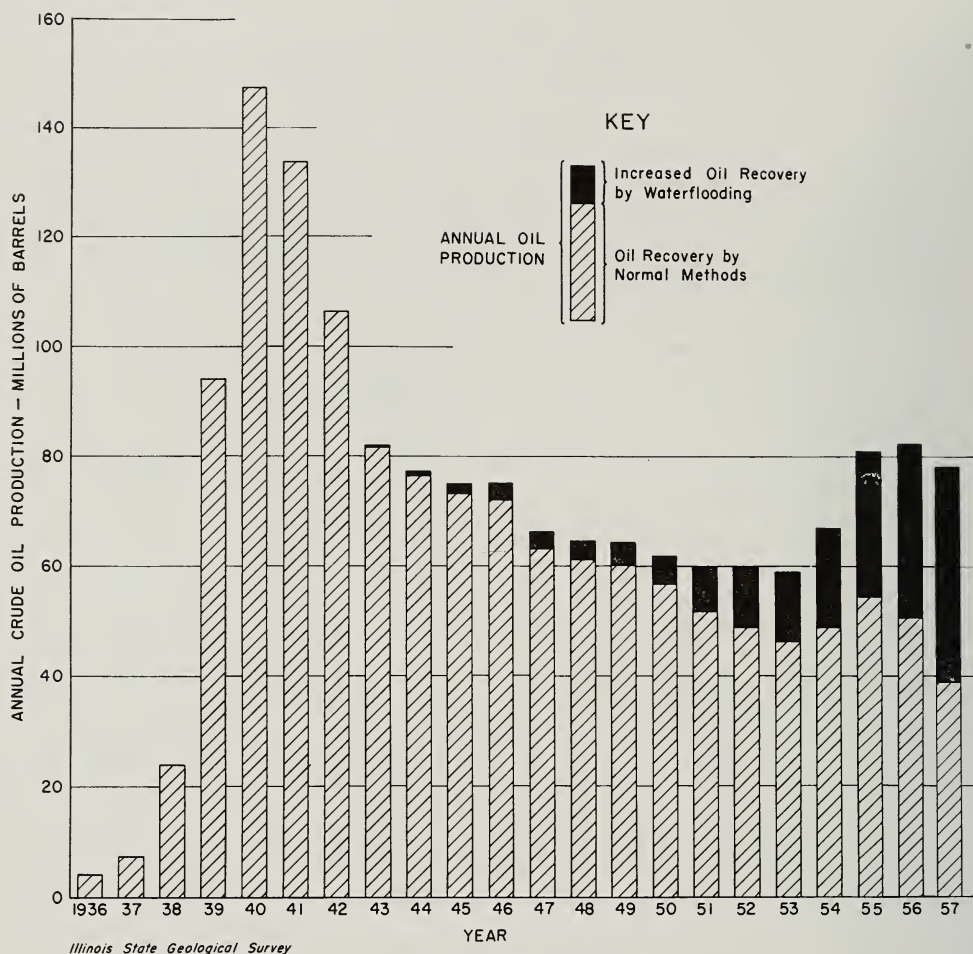


Fig. 4. — Annual crude oil production in Illinois.

has further discussed and agreed upon the methods to be used in an attempt to analyze this problem.

The State Geological Survey sent the revised questionnaire to all operators of Illinois waterfloods and compiled the data returned.

This report supplements eight similar summaries of waterflood operations published by the Illinois State Geological Survey that cover the years 1949 through 1956.

SUMMARY OF RESULTS

Reversing the trend of the past several years, Illinois' oil production in 1957 decreased some 5,665,000 barrels from the

previous year to a total of 76,649,000 barrels. Waterflood oil production continued its upward trend and increased from 31,300,000 barrels in 1956 to 36,050,000 barrels in 1957, representing 47 percent of the state's total oil production. The gain of 4,750,000 barrels represents a 15 percent increase over the previous year. Controlled waterflood projects accounted for 34,300,000 barrels of the total and are reported in table 13. The remaining 1,750,000 barrels is estimated to have been produced from "dump" floods.

It should be emphasized that the decrease in the total oil production was not necessarily due to a lower production capacity but in all probability was the re-

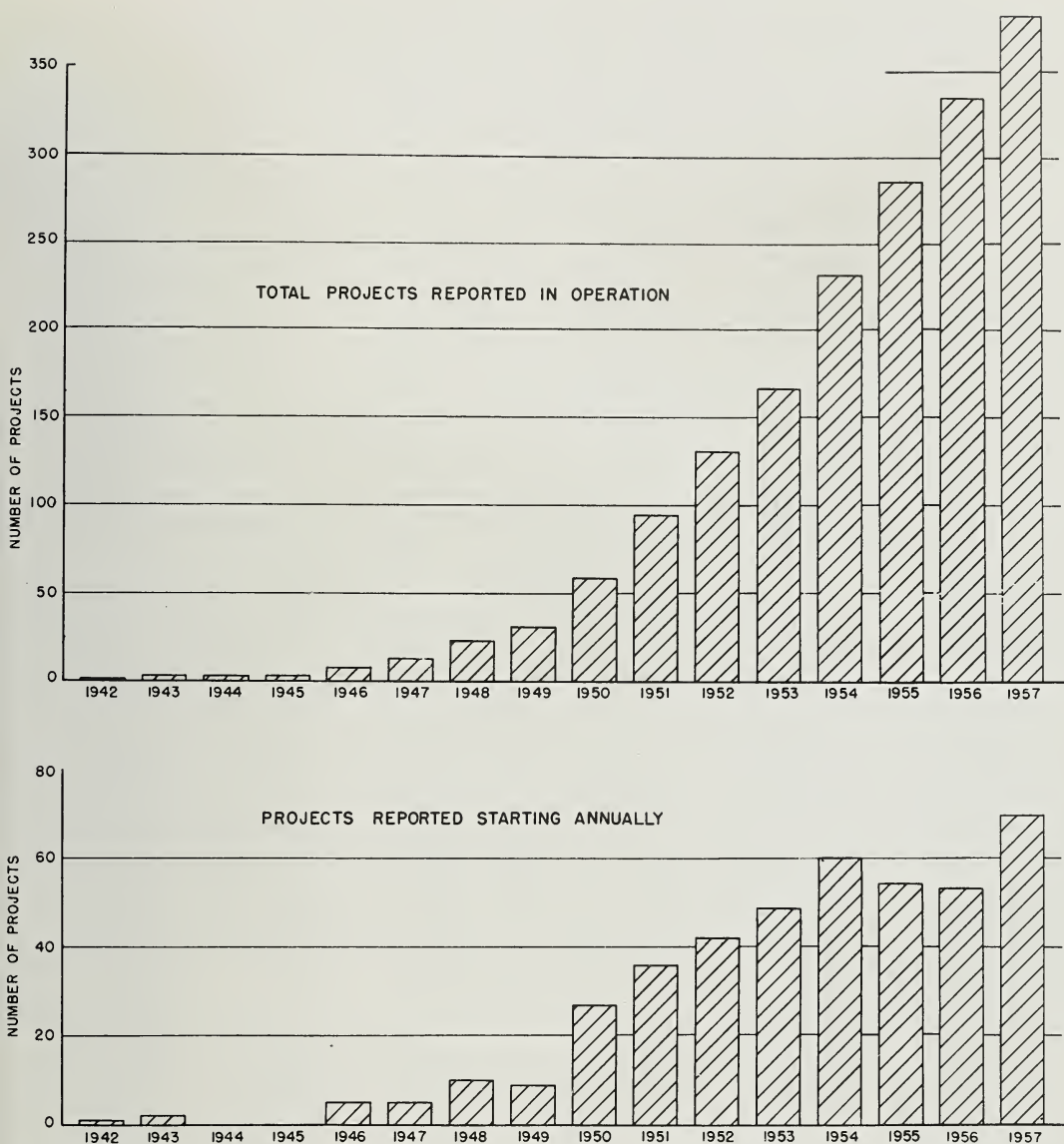


Fig. 5. — Reported development of waterflood projects in Illinois.

sult of a drastic curtailment of pipe-line runs during the summer of 1957. This "proration" was felt throughout the Illinois basin, and since both secondary and primary operations were affected, it is believed that they suffered more or less equally.

The effect of waterflood operations on the state's annual oil production since 1936 may be seen in figure 4. The cumulative waterflood recovery at the end of 1957 was approximately 169,250,000 barrels which includes an estimated 23,250,000 barrels of "dump" flood oil.

Table 13 is a summary of the data collected from waterflood operators through the use of questionnaires. The 382 active projects are arranged alphabetically by fields and are numbered according to the county in which they are located.

Following is a key to map numbers in figures 6, 7, and 8 and a summary of waterflood activity by counties.

PROJECT NUMBERS BY COUNTY

SEE FIGURES 6, 7, AND 8

NUMBER OF PROJECTS

Number	County	Active water-flood	Active pressure maintenance	Abandoned	Total
000	Bond	2	1	0	3
100	Christian	3	0	0	3
200	Clark	17	0	6	23
300	Clay	21	0	0	21
400	Clinton	5	3	1	9
500	Coles	3	0	0	3
600	Crawford	61	0	5	66
700	Cumberland	4	0	0	4
800	Douglas	0	0	0	0
900	Edgar	0	0	0	0
1000	Edwards	11	3	2	16
1200	Fayette	23	1	0	24
1300	Franklin	7	0	0	7
1400	Gallatin	14	1	0	15
1500	Hamilton	7	0	0	7
1600	Hancock	0	0	0	0
1700	Hardin	0	0	0	0
1800	Jackson	0	0	0	0
1900	Jasper	7	0	1	8
2000	Jefferson	5	2	1	8
2100	Johnson	0	0	0	0
2200	Lawrence	28	0	3	31
2300	Macon	0	0	0	0
2400	Macoupin	0	0	0	0
2500	Madison	2	0	0	2
2600	Marion	12	0	0	12
2700	McDonough	0	0	0	0
2800	Monroe	0	0	0	0
2900	Montgomery	0	0	0	0
3000	Moultrie	0	0	0	0
3100	Perry	0	0	0	0
3200	Pope	0	0	0	0
3300	Randolph	0	0	0	0
3400	Richland	17	0	1	18
3500	Saint Clair	0	0	0	0
3600	Saline	1	0	0	1
3700	Sangamon	0	0	0	0
3800	Shelby	0	0	0	0
3900	Wabash	46	0	6	52
4000	Washington	3	0	0	3
4100	Wayne	28	0	3	31
4200	White	55	3	14	72
4300	Williamson	0	0	0	0
Totals		382	14	43	439

Based on the data shown in table 13 (which excludes "dump" floods), a total of 295,750,000 barrels of water was injected during 1957 in order to recover 34,300,000 barrels of oil. This is a ratio of 8.6 barrels of water per barrel of recovered oil in 1957. The cumulative figures at the end of 1957 were 1,310,000,000 barrels of water and 146,000,000 barrels of oil for an overall ratio of 9.0 barrels of water per barrel of oil.

The projects are listed below in numerical order. This index is included so that a particular project which may be of interest and can be located geographically in figures 6, 7, or 8 can be easily found in table 13 where they are arranged alphabetically but not necessarily numerically.

PROJECTS IN NUMERICAL ORDER AS SHOWN IN FIGURES 6, 7, AND 8

No.	Oil pool	Operator	Project
000	Old Ripley	Cahill & Smith	Ripley
001†	Beaver Creek	Conrey & Conrey	Wrone Lease
002	Woburn C.	Arrow	
100	Assumption C.	Continental	Benoist
101	Assumption C.	Continental	Devonian
102	Assumption C.	Continental	Rosiclare
200	Casey	F. A. Bridge	States Oil
201	Casey	Forest	Casey
202	Casey	D. W. Franchot	N. Casey
203	Johnson N.	Bass & Hamman	N. Johnson
204	Johnson N.	C. L. McMahon	Block "B"
205	Johnson N.	C. L. McMahon	Block "B"
206	Johnson N.	Oldfield	V. Jones
207	Johnson N.	Pure	N. Johnson
208	Johnson N.	Tidewater	Clark #1
209	Johnson S.	Forest	S. Johnson
210	Johnson S.	Pure	Johnson Extension #1
211	Johnson S.	Pure	Johnson Extension #2
212	Johnson S.	Pure	Pure-Kewanee
213	Johnson S.	Pure	Weaver-Bennett
214	Martinsville	Fröderman & Connelly	Fröderman & Connelly
215	Siggins	General Operations	Siggins
216	Siggins	Pure	Union Group
217*	Casey	Calvan American	Shawver
218*	Martinsville	J. B. Buchman	
219*	Martinsville	Magnolia	Carper
220*	Martinsville	Magnolia	Casey
221*	Westfield	Ree	Hawkins
222*	Westfield	Forest	Parker
300	Clay City C.	Calvert	N. Clay City U.
301	Clay City C.	Phillips	Minnie Lease
302	Clay City C.	Pure	Banker School
303	Iola	Tidewater	Cora Davis
304	Iola	Tidewater	Dee & Heirs
305	Kenner	Texas	Kenner U.
306	Kenner W.	Phillips	W. Kenner
307	Oskaloosa	Texas	Oskaloosa
308	Passport	Magnolia	Stanley, et al.
309	Sailor Springs C.	Cities Service	Wyatt
310	Sailor Springs C.	Gulf	R. Keck
311	Sailor Springs C.	Magnolia	Sailor Springs U.
312	Sailor Springs C.	W. C. McBride	Goldsbey-Dickey
313	Sailor Springs C.	W. C. McBride	Duff-Keck

No.	Oil pool	Operator	Project	No.	Oil pool	Operator	Project
314	Sailor Springs C.	Phillips	Bothwell	649	Main C.	Ohio	See 623
315	Sailor Springs C.	Shulman	Colclasure	650	Main C.	Ohio	See 623
316	Sailor Springs C.	Shulman	Neff	651	Main C.	Ohio	See 623
317	Stanford S.	Gulf	S. Stanford	652	Main C.	Ohio	See 623
318	Sailor Springs C.	Ashland	E. Flora	653	Main C.	Ohio	See 623
319	Sailor Springs C.	Breur & Currin		654	Main C.	Ohio	See 623
320	Ingraham	Carter	Ingraham	655	Main C.	Ohio	See 623
400	Bartelo	T. R. Kerwin	Belle Oil	656	Main C.	Ohio	See 623
401	Bartelo	Robben Oil	Robben U.	657	Main C.	Ohio	See 623
402	Bartelo	H. S. Woodard	H. S. Woodard	658	Main C.	Ohio	See 623
403	Centralia	Morgan		659	Main C.	E. Constantin	Sanders
404	Centralia	Shell	Centralia	660	Main C.	General Oper-	
405†	Beaver Creek S.	Conrey & Conrey	Kneir-Ragland			ations	Culver Extension
406†	Germantown	Nap Co.	Germantown	661*	Main C.	Skiles	Correll-Curley
407†	Carlyle N.	Conrey & Conrey	Krietemeyer	662*	Main C.	Petroleum Pro-	
408†	Centralia	Sohio	Clinton			ducts Co.	
500	Mattoon	Carter	Mattoon	663*	Main C.	Ree	Meserve
501	Mattoon	Nokill	Mattoon	664*	Main C.	Skiles	Walter-Comm.
502	Westfield	General Oper-		665*	Main C.	Skiles	Weger
		ations	Johnson				
600	Bellair	Forest	Bellair	700	Siggins	Bell Brothers	Flood #1
601	Bellair	Pure	Fulton	701	Siggins	Leland Fikes	Levay Park
602	Main C.	Ashland	Birds #1	702	Siggins	Forest	Siggins
603	Main C.	Ashland	Birds #2	703	York	Trans-Southern	York
604	Main C.	Bell Brothers	Barrick	1000	Albion C.	Bristol	Biehl U. #2
605	Main C.	Calvan American	Bishop	1001	Albion C.	Calvert	S. Albion
606	Main C.	Calvan American	Grogan	1002	Albion C.	Jarvis Brothers & Marcell	H. Wick
						Superior	S. Albion S. R. P. #1
607	Main C.	Calvan American	Mitchell	1004	Albion C.	Superior	S. Albion #2
608	Main C.	W. Duncan	Tohill-Hughes-Robinson	1005	Albion C.	Superior	S. Albion #2
609	Main C.	E. Constantin	J. S. Kirk	1006	Albion C.	Tidewater	S. W. Albion
610	Main C.	E. Constantin	Smith				Biehl Sand U.
611	Main C.	Forest	Oblong	1007	Ellery E.	Herndon	
612	Main C.	D. W. Franchot	Birds				
613	Main C.	General Oper-	Culver	1008	Maple Grove C.	Ashland	Bennington
		ations		1009	Maple Grove C.	Investment Oil	Graede & Miller
614	Main C.	General Oper-	Little John	1010	Samsville N.	Ashland	W. Salem
		ations	Porterville	1011†	Albion C.	Calvert	S. Albion L. Biehl
615	Main C.	G. M. J.	Hardinville	1012†	*Albion C.	Superior	S. Albion U. #2
616	Main C.	Kewanee	Wright	1013†	Bone Gap C.	Gallagher	
617	Main C.	A. J. Leverton	Stanfield	1014*	Albion C.	Continental	Stafford
618	Main C.	Logan	Alexander-Reynolds	1015*	Albion C.	First Nat'l Pet. Trust	Brown
619	Main C.		Oil Center				
620	Main C.	Mahutska		1200	Louden	J. P. Babcock	Rhodes & McCloy
621	Main C.	Mahutska		1201	Louden	W. L. Belden	Hinton
622	Main C.	Mahutska		1202	Louden	W. L. Belden	
623,				1203	Louden	Burtschi	D. L. Burtschi
646				1204	Louden	Carter	Louden
thru				1205	Louden	Doran	Stewart & Dial
658	Main C.	Ohio	14 Projects	1206	Louden	General American	Devore Coop.
624	Main C.	Partlow & Cochonour	Rich	1207	Louden	Jarvis Brothers & Marcell	Homan
625	Main C.	Red Head	"D. I. M."	1208	Louden	Jarvis & Marcell	Yakey
626	Main C.	E. C. Reeves	Billingsley	1209	Louden	B. Kidd	Louden
627	Main C.	Shakespeare	McIntosh U.	1210	Louden	Kingwood	Yolton
				1211	Louden	Kingwood	Yolton
628	Main C.	Shakespeare	Montgomery U.	1212	Louden	J. A. Lewis	Louden Extension
629	Main C.	Tidewater	Clark-Hulse	1213	Louden	J. J. Lynn Estate	E. C. Smith
630	Main C.	Tidewater	Birch #1	1214	Louden	Mabee	Louden
631	Main C.	Tidewater	Birds Area	1215	Louden	Mabee	Louden
632	Main C.	Tidewater	Barrick-Walters	1216	Louden	Magnolia	Rhodes-Watson
633	Main C.	Tidewater	Good	1217	Louden	W. C. McBride	Coop.
634	Main C.	Tidewater	W. A. Howard	1218	Louden	Shell	Stokes Weiler
				1219	Louden	Shell	N. Loudon U.
635	Main C.	Tidewater	Ames	1220	Louden	R. H. Troop	S. Loudon U.
636	Main C.	Tidewater	Dennis-Hardin	1221	Louden	R. H. Troop	Durbin Area
637	Main C.	Tidewater	G. L. Thompson	1222	Louden	H. Rosenthal	Hiatt U.
638	Main C.	Tidewater	Henry-Ickmire	1223†	Louden	Carter	Washburn
639	Main C.	Tidewater	Lefever-Musgrave				Louden Devonian
640	Main C.	Tidewater	Montgomery-Seitzinger	1300	Benton	Shell	Benton U.
			Stifle-Drake	1301	Frankfort W.	Shell	W. Frankfort
641	Main C.	Tidewater		1302	Thompsonville	E. Carter	E. Thompsonville
				1303	Thompsonville	N. Carter	N. Thompsonville
642	Main C.	Tidewater	Stahl-Walters	1304	Thompsonville	N. J. & W.	N. Thompsonville
643	Main C.	Wilson	Hughes-Walker				U.
644	Main C.	Wiser	H. J. Musgrave	1305	Thompsonville	N. J. & W.	Thompsonville U.
645	Main C.	Wyman		1306	West Frankfort	Shell	W. Frankfort U.
646	Main C.	Ohio	See 623	1400	Inman W. C.	Ferral	
647	Main C.	Ohio	See 623	1401	Inman W. C.	Gallagher	Bradley U.
648	Main C.	Ohio	See 623	1402	Inman W. C.	Gulf	W. Inman U.

No.	Oil pool	Operator	Project	No.	Oil pool	Operator	Project
1403	Inman W. C.	Gulf	W. Inman U.	2228	Lawrence	Ohio	See 2214
1404	Inman W. C.	Phillips	Leverett	2229*	Lawrence	Calvan American	Waller
1405	Herald C.	Calvert	Cottonwood N.	2230*	Lawrence	Ree	Snyder
1406	Inman E. C.	Carter	Big Barn	2500	Livingston	W. H. Krohn	
1407	Inman E. C.	Carter	Kerwin-Crawford	2501	Livingston	Cahill & Smith	C. & O. Henke
1408	Inman E. C.	Carter	West U.	2600	Odin	Ashland	Odin
1409	Inman E. C.	Natural Re-	Big Barn	2601	Patoka	Sohio	Patoka Benoist
1410	Inman E. C.	Natural Re-	Big Barn	2602	Patoka	Sohio	Patoka Rosiclare
1411	Inman E. C.	Sun	Inman East	2603	Patoka	Sohio	Stein U.
1412	Junction	Alco	Junction	2604	Salem C.	Texas	Rosiclare Sand U.
1413	Roland C.	Ind. Farm Bureau	Omaha	2605	Salem C.	Texas	Salem U.
1414†	Omaha	Carter	Omaha	2606	Salem C.	Texas	Salem U.
1500	Bungay C.	Texas	Blairsville U.	2607	Salem C.	Texas	Salem U.
1501	Dale C.	Inland Producers	N. Rural Hill U.	2608	Salem C.	Texas	Salem U.
1502	Dale C.	Phillips	Cantrell U.	2609	Tonti S.	Slagter	
1503	Dale C.	Phillips	West End U.	2610	Wamac	D. Stinson	Wamac
1504	Dale C.	Texas	W. Dale U.	2611	Wamac	Wamac	Wamac
1505	Mill Shoals	B. Kidd	Gardner	3400	Calhoun C.	Ashland	Calhoun
1506	Mill Shoals	Sohio	B. R. Gray	3401	Calhoun C.	Phillips	Bohlander U.
1900	Clay City C.	Ashland	Boos E.	3402	Clay City C.	Ashland	Noble N.
1901	Clay City C.	Robinson &		3403	Clay City C.	Calvert	E. Noble U.
		Puckett	N. E. McCl. #1	3404	Clay City C.	Pure	Old Noble
1902	Clay City C.	Robinson &		3405	Clay City C.	Pure	S. Noble
		Puckett	S. W. McCl. #2	3406	Clay City C.	Pure	S. W. Noble
1903	Dundas E.	Gulf	Bessie	3407	Dundas E.	Gulf	E. Dundas U.
1904	Dundas E.	Sohio	Dundas E.	3408	Olney C.	Texas	E. Olney
1905	Ste. Marie	J. R. Randolph	Ste. Marie	3409	Parkersburg C.	Ohio	Parkersburg U.
1906	Willow Hill E.	Pure	Willow Hill U.	3410	Seminary	Pure	Seminary
1907*	Willow Hill E.	M. M. Spickler		3411	Stringtown	N. C. Davies	Stringtown
2000	Boyd	Superior	Boyd U.	3412	Stringtown	Helmerich &	
2001	Boyd	Superior	Boyd U.			Payne	Stringtown
2002	Divide E.	Gulf	Halloway	3413	Stringtown	Skelly	Stringtown
2003	Markham City	Tidewater	Newton	3414	Stringtown	Murvin & Steber	
2004	Markham City			3415*	Parkersburg C.	Calvert	Parkersburg
	W.	Gulf	Markham City	3416	Clay City C.	Ohio	See 2216
			W.	3417	Parkersburg C.	Ohio	See 2216
2005†	Boyd	Superior	Boyd Repressure	3600	Harco	Phillips	Noble "A"
2006†	Salem C.	Carter	Dix (R & P. M.)	3900	Allendale	Bass & Hamman	Gilliate
2007*	Markham City	Tidewater	Newton Invest-	3901	Allendale	Bass & Hamman	White
			ment Co.	3902	Allendale	Bass & Hamman	
2200*	Lawrence	Calvan American	Piper	3903	Allendale	Coon Creek	
2201	Lawrence	Baldwin &		3904	Allendale	G. S. Engle	Patton
		Baldwin		3905	Allendale	Forest	Allendale
2202	Lawrence	Bradley	C. M. Perkins	3906	Allendale	T. W. George	
2203	Lawrence	Bradley	C. M. Perkins	3907	New Harmony	T. W. George	E. Maud
2204	Lawrence	Dearborn	Applegate	3908	Allendale	Illinois Oil	2 Projects
2205	Lawrence	W. Duncan	L. C. David	3909	Allendale	B. Kidd	Allendale
2206	Lawrence	T. W. George	Klondike	3910	Allendale	Mattaland	D. F. Mattaland,
2207	Lawrence	W. W. Holden	Gray				et al.
2208	Lawrence	W. C. McBride	Crump "40"	3911	Allendale	Westfall	
2209	Lawrence	W. C. McBride	Crump-Fyffe	3912	Browns E.	T. W. George	Bellmont
2210	Lawrence	W. C. McBride	Neal	3913	Browns E.	Magnolia	Bellmont
2211	Lawrence	Murphy	Stoltz	3914	Browns E.	Magnolia	S. Bellmont
2212	Lawrence	Murphy	Stoltz	3915	Keensburg S.	White & Vickery	A. P. Garst
2213,				3916	Lancaster S.	Ashland	Lancaster S.
2219				3917	Mt. Carmel	G. S. Engle	G. Dunkel
thru				3918	Mt. Carmel	First Nat'l Pet.	
2223	Lawrence	Ohio	6 Projects			Trust	Wabash U.
2214,				3919	Mt. Carmel	T. W. George	N. Mt. Carmel
2224				3920	Mt. Carmel	T. W. George	
thru				3921	Mt. Carmel	O'Mera Brothers	Mt. Carmel
2228	Lawrence	Ohio	6 Projects	3922	Mt. Carmel	Shell	Mt. Carmel U.
2215	Lawrence	Ohio	Thorn	3923	Mt. Carmel	Skiles	Chapman-
2216,							Courter
3416,				3924	Mt. Carmel	Skiles	W. Mt. Carmel
3417	Lawrence, Clay			3925	Mt. Carmel	Texas	Stein
	City C., Park-	Ohio	3 Projects	3926	New Harmony C.	Ashland	Maud N.
	ersburg C.		S. Bridgeport U.	3927	New Harmony C.	Ashland	Ravenstein
2217	Lawrence	Shakespeare		3928	New Harmony C.	Cities Service	Brines U.
2218	St. Francisville	J. E. Bauer	All States Life	3929	New Harmony C.	Phillips	Shultz Lease
	E.	Ohio	See 2213	3930	New Harmony C.	Phillips	Shultz Lease
2219	Lawrence			3931	New Harmony C.	Skiles	Siebert Bottoms
				3932	New Harmony C.	Skiles	E. Maud
2220	Lawrence	Ohio	See 2213	3933	New Harmony C.	Skiles	E. Maud
2221	Lawrence	Ohio	See 2213	3934	New Harmony C.	Skiles	W. Maud
2222	Lawrence	Ohio	See 2213	3935	New Harmony C.	Sohio	Griffin N.
2223	Lawrence	Ohio	See 2213	3936	New Harmony C.	Luboil	Helm
2224	Lawrence	Ohio	See 2214	3937	New Harmony C.	Luboil	Helm
2225	Lawrence	Ohio	See 2214	3938	New Harmony C.	Luboil	Helm
2226	Lawrence	Ohio	See 2214				
2227	Lawrence	Ohio	See 2214				

No.	Oil pool	Operator	Project	No.	Oil pool	Operator	Project
3939	New Harmony C.	Luboil	Helm	4212	Herald C.	O. B. Mitchell	Bayley U.
3940	New Harmony C.	Luboil	Helm	4213	Maunie S.	Magnolia	Palestine U.
3941*	Mt. Carmel	First Nat'l Pet. Trust	Shaw Courter	4214	New Harmony C.	Arrow	Arrow-McBride, Hon-Bump-Craw-ford waterfloods
3942*	Berryville C.	Phillips	Tarply	4215	New Harmony C.	Arrow	}
3943*	Berryville C.	Phillips	Townsend	4216	New Harmony C.	Arrow	
3944*	Allendale	Ind. Farm Bureau	Woods	4217	New Harmony C.	Arrow	
3945*	Friendsville N.	Magnolia	J. L. Litherland	4218	New Harmony C.	Calstar	Ford
3946*	Mt. Carmel	First Nat'l Pet. Trust	Shaw Courter	4219	New Harmony C.	Calstar	Ford "B"
3947	New Harmony C.	T. W. George	E. Maud	4220	New Harmony C.	Clark & Clark	Maunie N. U.
3948	New Harmony C.	Swan		4221	New Harmony C.	Coy	
3949	New Harmony C.	West		4222*	New Harmony C.	Skiles	Smith-Davenport Greathouse
3950	Allendale	Ashland	Allendale	4223*	New Harmony C.	Sun	
4000	Cordes	Shell	Cordes Coop.	4224	New Harmony C.	Herndon & Ashland	Calvin
4001	Irvington	Kapp		4225	New Harmony	Herndon	Calvin
4002	Irvington	Mazzarino		4226	New Harmony C.	Herndon	Calvin
				4227	New Harmony C.	Inland	Bowman's Bend U.
4100	Aden C.	Horton		4228*	Concord	Great Lakes	
4101	Aden C.	Texas	Aden			Carbon	McClosky
4102	Aden C.	Texas	Aden	4229*	Concord	Phillips	Dallas
4103	Barnhill	Ashland	Barnhill	4230*	Maunie S.	Magnolia	Tar Springs U.
4104	Barnhill	Wausau	Simpson	4231	New Harmony C.	Sinclair	M. S. Donald
4105	Barnhill	Wausau	Simpson	4232*	Phillipstown C.	Skiles	L. O. Cleveland
4106	Barnhill	Wausau	Simpson	4233	New Harmony C.	Sun	Ford "B"
4107	Clay City C.	Calvert	Wilson	4234	New Harmony C.	Sun	Ford "B"
4108	Clay City C.	Tamarack Petroleum		4235	New Harmony C.	Superior	Kern-Hon U.
4109	Clay City C.	F & W	Miller-Lambrich	4236	New Harmony C.	Superior	New Harmony U.
4110	Clay City C.	General American	Covington U.	4237	New Harmony C.	Superior	New Harmony U.
4111	Clay City C.	T. W. George		4238	New Harmony C.	Superior	Waltersburg U.
4112	Clay City C.	Pure	Jordan School	4239*	Maunie S.	Magnolia	Maunie Coop.
4113	Clay City C.	Pure	N. E. Jordan School	4240	New Harmony C.	Tidewater	E. S. Dennis "A"
4114	Clay City C.	Pure	Van Fossan U.	4241	New Harmony C.	Tidewater	Evans
4115	Clay City C.	Robinson & Puckett	N. Puckett U.	4242	New Harmony C.	Tidewater	Evans
4116	Clay City C.	Robinson & Puckett	S. Puckett #1	4243	New Harmony C.	Tidewater	Evans
4117	Clay City C.	Shakespeare	E. Banker School	4244	New Harmony C.	Tidewater	E. S. Dennis "A"
4118	Clay City C.	Shakespeare	E. Geff U.	4245*	Phillipstown C.	C. E. Brehm	Phillipstown U.
4119	Clay City C.	Toklan					"A"
4120	Covington S.	General American	Heidinger-Vogel	4246*	Centerville E.	Sun	E. Centerville
4121	Johnsonville C.	Texas	Johnsonville U.	4247	New Haven C.	Hiawatha	New Haven
4122	Johnsonville C.	Texas	Johnsonville U.	4248	New Haven C.	Hiawatha	New Haven
4123	Goldengate C.	Cities Service	Goldengate	4249	Phillipstown C.	C. E. Brehm	Phillipstown U. B.
4124	Goldengate C.	Cities Service	Kletzker U.	4250	Phillipstown C.	Bristol	Grayville
4125	Keenville	Calvert	Keenville U.	4251	Phillipstown C.	British American	N. Calvin
4126	Keenville	W. Duncan	Keenville U.	4252	Phillipstown C.	Magnolia	Schmidt-Seifried
4127	Maple Grove C.	Winmar	W. Bennington	4253	Phillipstown C.	Phillips	Flora U.
4128*	Golden Gate C.	Cities Service	Golden Gate	4254	Phillipstown C.	Phillips	Laura
4129*	Barnhill C.	Wayne Development	Walter	4255	Phillipstown C.	Phillips	Phillipstown U.
4130*	Clay City C.	Gulf	Winona	4256	Phillipstown C.	Sun	Phillipstown
4200	Albion C.	Bristol	Biehl U. #1	4257	Phillipstown C.	Sun	Phillipstown
4201	Albion C.	Concho	N. Crossville	4258	Roland C.	Carter	S. W. Roland
4202	Albion C.	Concho	N. Crossville	4259	Roland C.	Carter	Stokes
4203	Centerville E.	Tekoil	E. Centerville	4260	Roland C.	Pure	Stokes-Browns-ville
4204	Centerville E.	Tekoil	E. Centerville	4261	Roland C.	Shell	Iron U.
4205	Concord	B. Kidd	Kerwin-Concord	4262	Roland C.	T. W. George	Pankey-More-head U.
4206	Concord	Phillips	Kerwin Lease	4263	Storms C.	Sinclair	Storms U.
4207	Concord	Phillips	Tuley Lease	4264†	Enfield S.	Ryan Oil	S. Enfield U. #1
4208	Concord N.	C. E. Brehm	Concord N.	4265†	Maunie S.	Nap Co.	S. Clear Pond
4209	Enfield S.	Ryan	S. Enfield U. #2	4266†	Phillipstown C.	Nap Co.	Stokes "B" #3
4210	Herald C.	C. E. Brehm	Herald W.	4267*	Centerville E.	Lesh	Centerville E.
4211	Herald C.	Mabee-Allen	Ackerman U.	4268*	Maunie S.	Magnolia	Tar Springs E. #2
				4269*	New Harmony C.	Sun	Ford "A"
				4270*	Phillipstown C.	Sun	Phillipstown
				4271*	Storms C.	Mabee	

†—Pressure maintenance.

*—Abandoned.

The reported number of waterflood projects commenced during each year from 1942 through 1957 is shown in figure 5. The total of 382 projects in 1957 is an increase of 49 during the past year and is consistent with the average rate of growth since 1949. These 382 floods represent the development of 112,000 acres, or about 20 percent of the state's total oil-productive acreage, and gives an average cumulative waterflood recovery of 1300 barrels per acre. It is undoubtedly too early in the waterflood life of the Illinois basin to attach any particular significance to this figure at this time but it should prove interesting to watch this value in future years.

There were 5,734 injection wells and 7,814 producers reported in operation during 1957.

As can be seen in table 13, there were 62 projects that were curtailed during 1957 by reducing production, injection, or both; 21 of these were curtailed in production only, one by injection only, and 40 by limiting both production and injection. It is planned that the operators of these

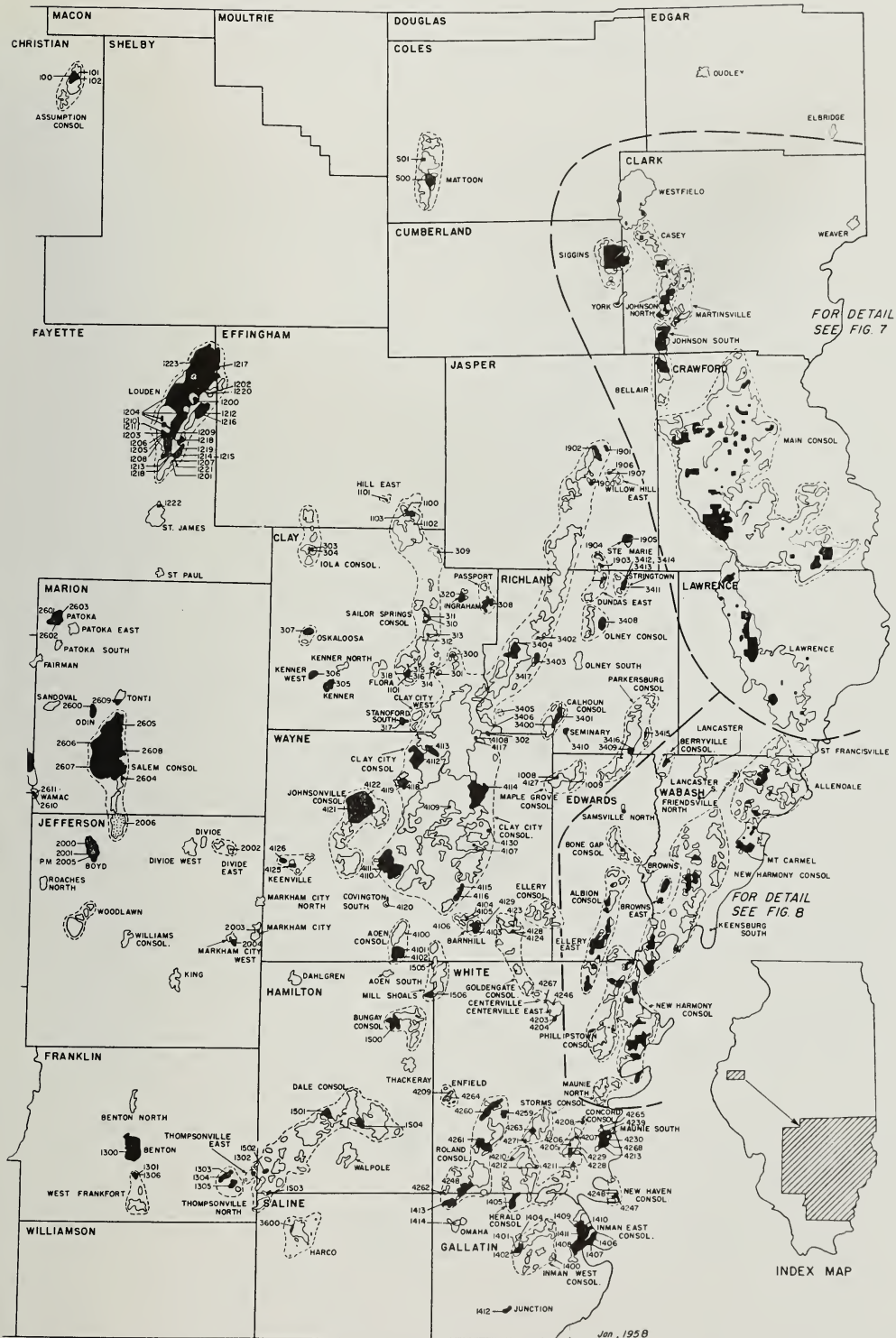
various floods will be contacted in the near future to determine if there are perhaps a few projects with sufficient geologic and operational control and available data to warrant a detailed study.

Table 14 represents the reported data on a total of 43 projects that had been abandoned by the end of 1957.

Those projects reporting the use of water injection as a means of pressure maintenance are listed in table 15. No attempt has been made to differentiate between primary oil produced and that production which is attributable to pressure maintenance operations.

Figures 6, 7, and 8 show the location of all projects listed in tables 13, 14, and 15. Because of the greater concentration of waterflood development in the areas of the "Old Field" and the Wabash Valley, these regions are shown as separate maps in figures 7 and 8.

A generalized geologic column, adjacent to figure 6, shows the stratigraphic sequence of oil-producing formations in the Illinois basin. It lists the oil producing formations and the number of reported floods in each.



maintenance operations in Illinois during 1956 shown in black. Areas outlined by heavy dashes 7 and 8.

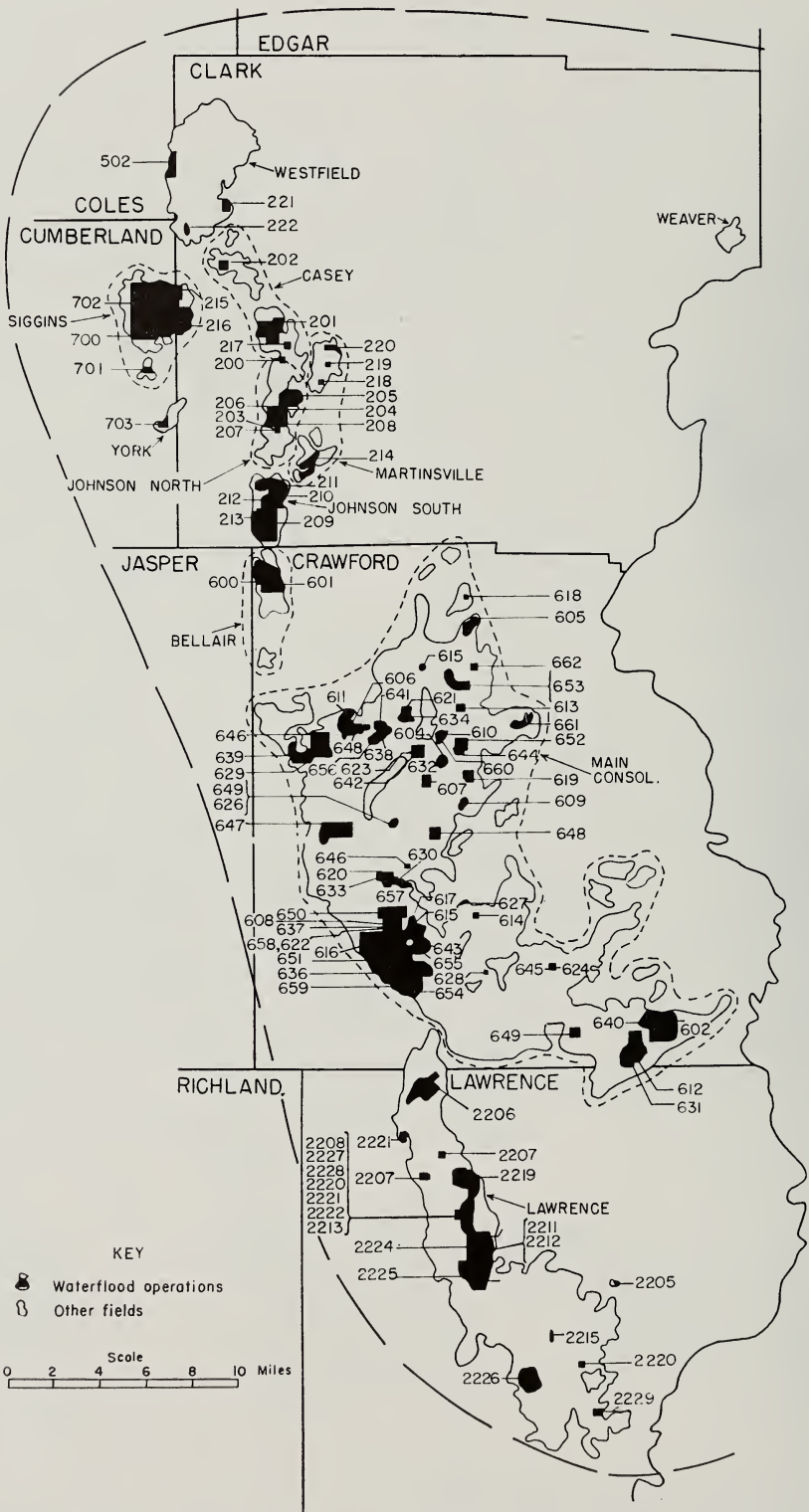


Fig. 7. — Detail of waterflood operations in Clark, Crawford, and Lawrence Counties.

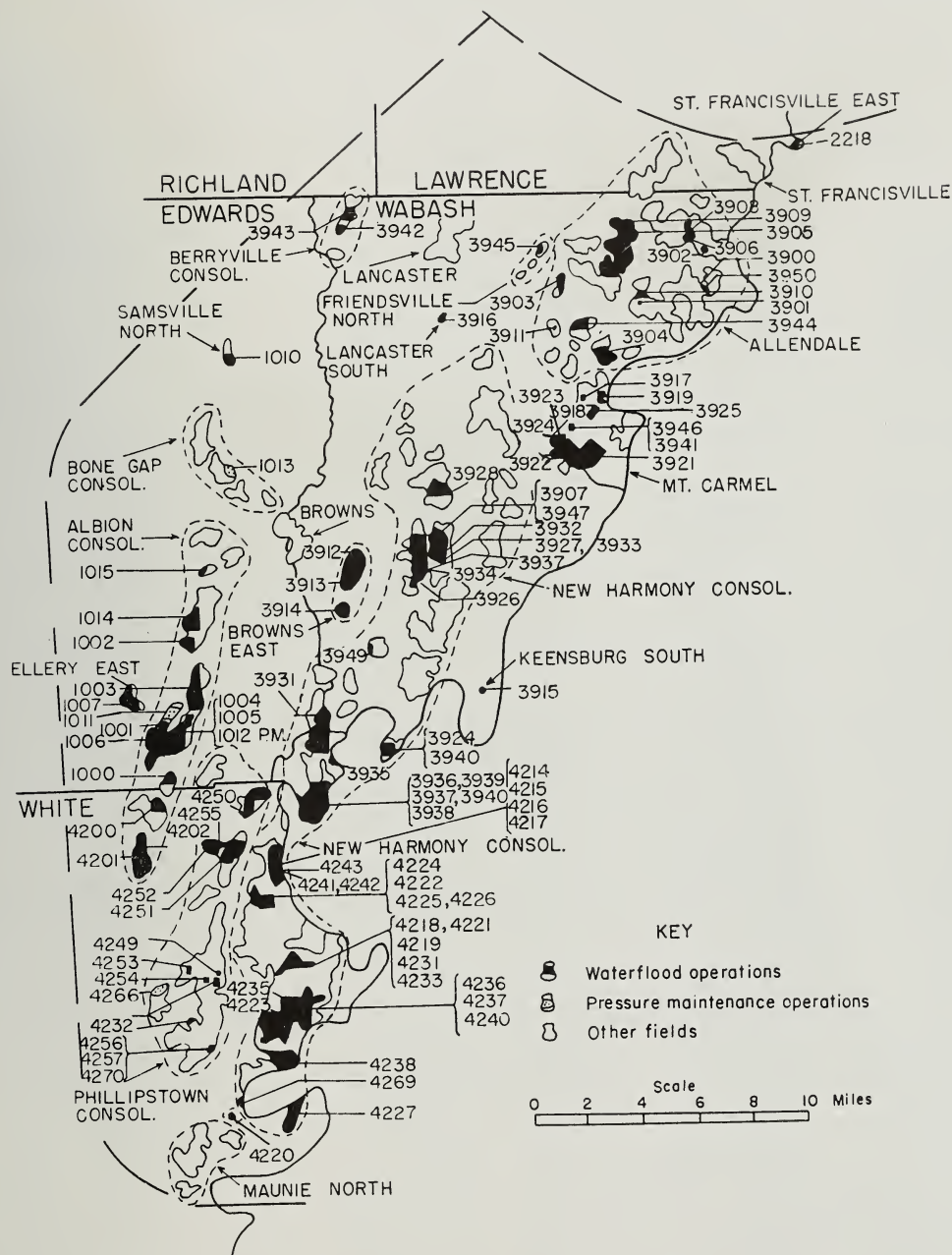


Fig. 8. — Detail of waterflood and pressure maintenance operations in Wabash, Edwards, and White Counties.

TABLE 13.—ILLINOIS WATERFLOOD PROJECTS

Map No.						General
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
4100 Aden C		Horton*	Wayne		11-56	Aux Vases
4101 Aden C		Texas	Wayne	Aden	8-46	Aux Vases
4102 Aden C		Texas	Wayne	Aden	8-46	McClosky
4200 Albion C		Bristol*	White	Biehl U #1	8-49	U. Biehl
1000 Albion C		Bristol*	Edwards	Biehl U #2	12-50	U. Biehl
1001 Albion C		Calvert	Edwards	S. Albion	12-55	U. Biehl
4201 Albion C		Concho	White	N. Crossville	10-52	Cypress
4202 Albion C		Concho	White	N. Crossville	10-52	Tar Springs
1002 Albion C		Jarvis Bros. & Marcell	Edwards	H. Wick	7-51	McClosky
1003 Albion C		Superior	Edwards	S. Albion S.R.P. #1	1-55	Biehl and Waltersburg
1004 Albion C		Superior	Edwards	S. Albion #2	8-56	Aux Vases
1005 Albion C		Superior	Edwards	S. Albion #2*	8-56	Biehl
1006 Albion C		Tidewater	Edwards	S. W. Albion Biehl Sd. U	5-56	Biehl
3950 Allendale		Ashland	Wabash	Allendale	9-55	Biehl
3930 Allendale		Bass & Hamman*	Wabash	Gilliate	11-54	Biehl
3931 Allendale		Bass & Hamman*	Wabash	White	6-52	Biehl
3932 Allendale		Bass & Hamman*	Wabash			Biehl
3933 Allendale		Coon Creek*	Wabash		6-57	Biehl
3934 Allendale		G. S. Engle*	Wabash	Patton	53	Cypress
3935 Allendale		Forest	Wabash	Allendale	6-55	Biehl & Jordan
3906 Allendale		T. W. George*	Wabash			Biehl
3908 Allendale		Ill. Oil*	Wabash	2 projects	10-57	Biehl & Jordan
3909 Allendale		Barron Kidd	Wabash	Allendale	9-53	Biehl & Jordan
3910 Allendale		Mattaland	Wabash	D. F. Mattaland	6-52	Biehl
3911 Allendale		Westfall*	Wabash			Biehl
100 Assumption C		Continental	Christian	Benoist	7-50	Benoist
101 Assumption C		Continental	Christian	Devonian*	5-55	Devonian
102 Assumption C		Continental	Christian	Rosiclare	6-55	Rosiclare
4103 Barnhill		Ashland	Wayne	Barnhill	1-51	McClosky
4104 Barnhill		Wausau	Wayne	Simpson	10-56	Aux Vases
4105 Barnhill		Wausau	Wayne	Simpson	10-56	Ohara
4106 Barnhill		Wausau	Wayne	Simpson	9-57	Rosiclare
400 Bartelso		T. R. Kerwin	Clinton	Belle Oil	4-52	Cypress
401 Bartelso		Robben Oil	Clinton	Robben U	11-53	Cypress
402 Bartelso		H. S. Woodard	Clinton	H. S. Woodard	1-54	Cypress
600 Bellair		Forest	Crawford	Bellair	7-48	Bellair "500"
601 Bellair		Pure	Crawford	Fulton	7-48	Bellair "500"
1300 Benton		Shell	Franklin	Benton U	11-49	Tar Springs
2000 Boyd		Superior	Jefferson	Boyd U	8-54	Aux Vases
2001 Boyd		Superior	Jefferson	Boyd U	1-55*	Benoist
3912 Browns E.		T. W. George*	Wabash	Bellmont	1-51	Cypress
3913 Browns E.		Magnolia	Wabash	Bellmont	11-47	Cypress
3914 Browns E.		Magnolia	Wabash	S. Belmont	4-56	Cypress
1500 Bungay C		Texas	Hamilton	Blairsville U	6-48	Aux Vases
3400 Calhoun C		Ashland	Richland	Calhoun	9-51	McClosky
3401 Calhoun C		Phillips	Richland	Bohlander U	6-50	McClosky
200 Casey		F. A. Bridge*	Clark	States Oil	1-54	Casey
201 Casey		Forest	Clark	Casey	3-50	Casey
202 Casey		D. W. Franchot	Clark	N. Casey	12-53	Casey
4203 Centerville E.		Tekoil	White	E. Centerville	3-56	Cypress
4204 Centerville E.		Tekoil	White	E. Centerville	5-56	Tar Springs
403 Centralia		Morgan*	Clinton			Benoist
404 Centralia		Shell	Clinton	Centralia	5-56	Ben. & Cyp.
1900 Clay City C		Ashland	Jasper	Boos E.	9-53	McClosky
3402 Clay City C		Ashland	Richland	Noble N.	7-54	McClosky
300 Clay City C		Calvert	Clay	N. Clay City U	6-55	Rosiclare
3403 Clay City C		Calvert	Richland	E. Noble U	5-55	Rosiclare
4107 Clay City C		Calvert	Wayne	Wilson	4-55	Rosiclare
4108 Clay City C		Tamarack Pet.*	Wayne		2-54	Rosiclare
4109 Clay City C		F & W	Wayne	Miller-Lambrich U	8-50	Ohara Rosiclare McClosky

REPORTED OPERATING DURING 1957

Information			Production and injection statistics (thousand bbls.)							Map No.
Location		Curtailed during '57	Secondary recovery							
			Water injection		Oil production		Water production			
Sec.	T.-R.		Inj.	Prod.	Total 1957	Cumu- lative 12-31-57	Total 1957	Cumu- lative 12-31-57	Total 1957	
34	2S- 7E									4100
8, 9, 16, 17, 20	3S- 7E			587	3,527	88.6	735	1,121	3,169*	4101
8, 9, 16, 17, 20	3S- 7E			662	3,797	58.4	473	*	*	4102
22, 23	3S-10E			702	4,032§	75.2	1,057‡	222	512‡	4200
23	3S-10E			431	2,385§	32.6	510‡	203	619‡	1000
1, 2	3S-10E		x	175	317	73.1	106	33	53	1001
26, 27, 34, 35	3S-10E			529	3,019	31.5	290	274	1,003	4201
26, 27, 34, 35	3S-10E			136	690	7.0	53	12	57	4202
24	2S-10E			70	239†	1.1*	1*	2*		1002
25, 36	2S-10E		x	373	1,287	124.2	344	168	425	1003
3, 31	2S-11E									
1, 2, 11, 12	3S-10E		x	177	251	*	*	*	*	1004
1, 2, 11, 12	3S-10E		x	279	383	97.2	98‡	341	558‡	1005
2, 11, 14	3S-10E		x	873	1,391	320.4	388*	351	411	1006
13	1N-12W			35	85	13.4	37*			3950
13	1N-12W									3900
22	1N-12W									3901
7	1N-11W									3902
7	1N-12W									3903
28	1N-12W									3904
3, 4, 9, 10	1N-12W			3,470	8,797	202.7	591*			3905
36	2N-12W									3906
1	1N-12W									
23, 26, 35	2N-12W									3908
3	1N-12W			667	1,761	30.1	148	542	1,033	3909
15	1N-12W									3910
19	1N-12W									3911
3, 4, 9, 10, 15, 16, 21	13N- 1E			819	5,729	104.9	963	285	1,757	100
9	13N- 1E			258	683	53.7	66	23	27	101
9, 10	13N- 1E			81	196	78.8	134	56	98	102
26, 34, 35	2S- 8E			845	4,815*	60.7	973			4103
27	2S- 8E			54	63	3.0	3	1	1	4104
27	2S- 8E	x	x	43	53	6.8	7	1	2	4105
27	2S- 8E			14	14	None	None	None	None	4106
4	1N- 3W			114	710	8.9	118*	50		400
4	1N- 3W			509	1,690	93.9	515*	295	599	401
5, 8	1N- 3W			288	968	52.2	207*	216	544	402
2, 11, 12	8N-14W			1,488	15,703	42.6	584			600
1, 2, 11, 12	8N-14W			3,695	36,210	75.4	1,029	2,066	15,115	601
23 to 26, 35, 36	6S- 2E			10,852	84,981	755.1	13,077*	9,386	44,637	1300
18, 30, 31	6S- 3E									
18, 19, 20, 30	1S- 2E			1,209	13,684	*	*	*	*	2000
13, 24, 25	1S- 3E									
18, 19, 20, 30	1S- 2E			4,817	13,822	381.3	848‡	3,869	9,230‡	2001
13, 24, 25	1S- 3E									
1, 2, 11, 12	2S-14W									3912
2, 11	2S-14W		x	33	801	10.1	561*	33	252	3913
11, 14	2S-14W		x	218	368	62.9	78*	18	20	3914
16, 17, 20, 21	4S- 7E			1,146	5,725	117.5	590	253	978	1500
7, 18, 13	2N-9&10E			274	1,262*	11.2‡	108‡			3400
6, 7	2N-10E	x	x	242	1,945	13.0	224	234	1,463	3401
26	10N-14W									200
14, 15, 23	10N-14W			533	5,841	28.8	391	*	*	201
4	10N-14W			178	789	None	None	*	*	202
33	11N-14W									
18	4S-10E	x	x	156	389*	73.8	135			4203
18	4S-10E	x	x	182	265	*	*			4204
35	2N- 1W									403
1, 2, 12, 35, 36	1N- 1W		x	4,615	7,429	1,728.6	1,864	852	1,014	404
2	6N-10E			40	209*	3.4	15			1900
35	4N- 9E			40*	250*	2.6‡	6‡			3402
5, 8	3N- 8E	x	x	219	503	20.0	51*	96	169	300
2, 10, 11	3N- 9E			328	881	25.1	44*	170	314	3403
15	1S- 8E			18*	137*	3.0	7‡			4107
22	2N- 8E	x	x	117†	382†	11.9	67	117†	382†	4108
29	1N- 8E			*	*	8.0	120			4109

TABLE 13. —

Map No.	Development as of 12-31-57						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Av. well-head pressure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
4100										
4101	13	16	Perimeter		640	1,050	Penn. Sd & Prod	B	12.4	1,392
4102	12	15	Perimeter		560	920	Penn. Sd & Prod	B	42.0	1,315
4200	2	10	Flank		220	220	River & Prod	F & B	56.5	1,165
1000	2	5	Flank		90	90	River & Prod	F & B	26.8	1,024
1001	2	6	Perimeter	10	110	130	Penn. Sd	B	13.3	438
4201	8	21	Perimeter	10	250	300	River & Prod	F & B	15.1	1,500
4202	4	5	5 - Spot	10	100	100	River & Prod	F & B	15.5	1,500
1002	1	1			10	140		B	6.4	
1003	6	21	Flank		222 325	222 325	Gr Bed & Prod	F & B	8.8	1,173
1004	6	11	5-Spot	20	243	243	Gr Bed & Prod	F & B	8.1	1,402
1005	3	4			79	79	Gr Bed & Prod	F & B	6.0	631
1006	18	18	5-Spot	20	710	710	Shallow Sd & Prod	F & B	8.3	305
3950	1	2			20	20	Penn. Sd	B	6.4	220
3900										
3901										
3902										
3903										
3904										
3905	25	24	Mod. 5-Spot	25	300		Gr Bed & Prod	F & B	13.6	828
3906										
3908										
3909	3	4		20	70 44	75 44	Upper Sd	F	16.3	
3910										
3911										
100	14	25	Perimeter		450	450	Creek & Prod	F & B	12.6	917
101	4	8	5-Spot		140	140	Creek & Prod	F & B	13.6	194
102	1	9	Line Drive		80	100	Creek & Prod	F & B	18.4	312
4103	8	16	Irregular		260	320	Cypress	B	32.2	*
4104	1*	4			40	160	Penn. Sd	F & B	10.6	438
4105	1*	4			40	70	Penn. Sd	F & B	14.8	428
4106	1	2			30	30	Penn. Sd	F & B	24.4	None
400	5	5	5-Spot	5	40	40	Tar Springs	B	4.2	550
401	12	19	5-Spot	10	200	200	Bethel	B	9.7	550
402	5	9	5-Spot	10	80	75	Bethel & Prod	B	10.5	550
600	56	51	5-Spot	4.4	200		Gr Bed	F	1.9	285
601	131	125	5-Spot	4.4	443	443	Gr Bed	F	3.7	280
1300	109	120	5-Spot	20	2,200	2,200	Lake & Prod	F & B	7.8	486
2000	12	*	Peripheral		569	569	Lake & Prod	F & B	23.2	525
2001	8	69	Peripheral		1,564	1,564	Lake & Prod	F & B	95.3	868
3912										
3913	6	8	Line Drive	10	169	190	Tar Springs & Prod	B		
3914	5	8	5-Spot	20	75	130	Shallow Sd & Prod	F & B		
1500	10	12		20	640	640	Penn. Sd & Prod	B	2.0	1,351
3400	3	7	Irregular		140	195	Cypress	B	41.7	
3401	3	8	Irregular	20	160	280	Penn. & Prod	B	22.1	1,346
200										
201	76	66	5-Spot	4.4	280		Gr & Prod	F & B	1.9	236
202	15	10	5-Spot	4.4	40	560	Gr Bed & River	F	1.6	
4203	5	22	5-Spot	10	130	280	Palestine Sd	B	5.7	1,153
4204	3	22	5-Spot	10	130	280	Palestine Sd	B	20.8	811
403										
404	103	113	5-Spot	20	Cyp-850 L.Cyp-270 Ben-1,300	850 270 1,500	Devonian & Prod	B	3.2	200
1900	2	4	Flank		40	40	Prod & River Gr	F & B	6.9	
3402	1	1			20	40	Cypress	B	21.7	204
300	2	8	Peripheral	20	460	460	Cypress	B	60.0	
3403	2	13	Peripheral	20	280	280	Cypress	B	20.4	
4107	1	1	Peripheral	20	40	40	Cypress	B	5.5	
4108	1	2		20	60		Prod	B	32.2	
4109	4	4	Irregular	10	120	180	Cyp. & Prod	B		

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,200	10.0	22.0	150	35.4		*No data available.	4100
3,350	3.6			35.4	6.5 @ 100°F	*Includes Aden McClosky water production.	4101
1,950	17.0	20.2	265	38.0	5.3 @ 90°F	*Water production included with Aden Aux Vases flood.	4102
						*Previously operated by S.C. Yingling. †Since 1-1-55.	4200
						‡Includes primary production since start of flood.	
						§Corrected figure.	
1,450	22.0	19.3	303	35.8	6.0 @ 84°F	†Since 1-1-55. ‡Includes primary production since start of flood. §Corrected figure. *Same as above.	1000
2,075	18.0	20.0	200	33.4		*Includes primary production since start of flood.	1001
2,850	12.0	18.0		37.0			4201
2,460	6.0	18.0		37.0			4202
3,150	30.0			37.0		*Estimated production from only well stimulated. †Excluding 1-55 to 12-56.	1002
2,025	7.1	18.5	807	36.0	5.4 @ 85°F		
2,400	12.3		74		4.7 @ 90°F		1003
2,550	10.0	20.6	53	37.5	4.3 @ 98°F	*Included in Biehl production since 8-1-56.	1004
1,485	15.8	18.2	326	37.3	4.5 @ 84°F	*Previously abandoned, reinstated as an active flood during 1956. †Corrected figure.	1005
1,805	16.0	18.0	150	32.2		*Includes primary production since start of flood.	1006
1,475	15.0			36.0		*Includes primary production since start of flood.	3950
1,490	17.0					*No 1957 data available.	3900
1,450	17.0					*No 1957 data available.	3901
						*No data available.	3902
						*No data available.	3903
2,000	16.0			34.8		*No 1957 data available.	3904
1,500	B-15.0 J-13.0	17.7 14.9	390 100	37.0	12.3 @ 60°F	*Includes primary production since acquisition for water flooding.	3905
						*No data available.	3906
						*No data available.	3908
1,490	32.0	16.5	600	37.0	7.6 @ 79°F		3909
1,385	15.0						3910
						*No data available.	3911
1,050	12.7	19.4	103	39.8			100
2,280	13.0	12.0		39.3	1.8 @ 88°F	*Pilot flood.	101
1,150	12.0	22.0	561	39.3	2.6 @ 78°F		102
3,350	9.0			39.0		*Cumulative to 12-31-56 was a controlled dump flood.	4103
3,253	14.0	18.7	42	38.0	7 @ 85°F	*Dual injection well.	4104
3,323	8.0	20.1	108	39.0		*Dual injection well.	4105
3,365	5.0			40.0	6 @ 78°F		4106
971	15.0	22.2	165	37.0	6.3 @ 71°F	*Includes primary production since start of flood.	400
980	12.0	20.0	110	36.9	6.3 @ 71°F	*Includes primary production since start of flood.	401
970	15.0	21.0	210	36.0		*Includes primary production since start of flood.	402
550	38.0	17.1	148	32.4	16 @ 77°F	Previously subjected to gas injection.	600
560	21.0	18.6	149	32.0	18.7 @ 77°F	Previously subjected to gas injection.	601
2,100	35.0	19.0	65	40.4	3.5 @ 86°F	*Total oil production, cumulative to 12-31-56. Corrected to properly reflect total oil production since injection commenced.	1300
2,130	11.9	21.4	240	36.8	4.4 @ 90°F	*Included with Boyd Field Unit, Benoist. Previously used for gas storage.	2000
2,065	17.3	17.5	173	39.5	3.2 @ 90°F	*Pressure maintenance 6-45 to 1-55. Includes Aux Vases.	2001
						†Since 1-1-55.	
2,570	13.0			36.0	4.6 @ 90°F	*No 1957 data available.	3912
2,570						*Includes primary production since start of flood.	3913
2,560						*Includes primary production since start of flood.	3914
3,330	15.5	19.6	92	37.5	1.8 @ 99°F		1500
3,150	6.0			37.0		*Dump flood. ‡Includes primary production since start of flood.	3400
3,130	10.0	11.2	68	39.0			3401
444	20.0					*No 1957 data available.	200
450	10.0	17.4	173	31.9	16.6 @ 70°F	Previously subjected to gas injection.	201
290	20.0	21.5	400	26.6	50.0 @ 60°F	*Negligible.	202
2,845	15.0	15.4	12	36.2	3.4 @ 110°F	*Corrected figure.	4203
2,460	8.0	15.9	98	35.0	4.1 @ 105°F	*Included in Cypress production.	4204
						*No data available.	403
C-1,200	C-10.0	19.3	74	38.0			404
B-1,350	L.C.-9.0 B-19.0	21.1 19.6	225 186				
2,645	8.0			40.0	3.2 @ 75°F	*Injection shut down from 12-55 to 5-57.	1900
3,000	5.0			38.0		*Controlled dump flood. ‡Includes primary production since start of flood. †Corrected figure.	3402
3,010	5.0			36.4		*Includes 1956 primary production.	300
2,950	11.0			38.0		*Includes 1956 primary production.	3403
3,159	10.0					*Estimated injection. ‡Includes primary production from 4-55 to 12-55.	4107
3,033	15.0					*Formerly Demier. †Data adjusted from 1956 values.	4108
3,050	5.0					*Dump flood.	4109

TABLE 13.—

Map No.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
4110	Clay City C	General American	Wayne	Covington U	6-55	Ste. Genevieve
4111	Clay City C	T. W. George*	Wayne			Aux Vases
301	Clay City C	Phillips	Clay	Minnie Lease	7-53	Rosiclare
302	Clay City C	Pure	Wayne	Banker School	1-57	Cypress
3404	Clay City C	Pure	Richland	Old Noble	8-54	McClosky
3405	Clay City C	Pure	Richland	S. Noble	8-57	McClosky
3406	Clay City C	Pure	Richland & Wayne	S. W. Noble	8-57	Rosiclare
4112	Clay City C	Pure	Wayne	Jordan School	10-55	Aux Vases
4113	Clay City C	Pure	Wayne	N. E. Jordan School*	10-56	Aux Vases
4114	Clay City C	Pure	Wayne	Van Fossan U	1-53	McClosky
1901	Clay City C	Robinson & Puckett	Jasper	N. E. McCl. #1	5-53	McClosky
1902	Clay City C	Robinson & Puckett	Jasper	S. W. McCl. #2	5-53	McClosky
4115	Clay City C	Robinson & Puckett	Wayne	N. Puckett U	1-56	Aux Vases
4116	Clay City C	Robinson & Puckett	Wayne	S. Puckett #1	8-54	Aux Vases
4117	Clay City C	Shakespeare	Wayne	E. Banker School	1-57	Cypress
4118	Clay City C	Shakespeare	Wayne	E. Geff U*	1-57	Aux Vases
4119	Clay City C	Toklan	Wayne		2-55	Aux Vases
4205	Concord	Barron Kidd	White	Kerwin-Concord*	1-55	McClosky
4206	Concord	Phillips	White	Kerwin Lease	2-53	Rosi. & McCl.
4207	Concord	Phillips	White	Tuley Lease	7-51	McClosky
4208	Concord N.	C. E. Brehm	White	Concord N.	12-52	Aux Vases
4000	Cordes	Shell	Washington	Cordes Coop.*	8-50	Benoist
4120	Covington S.	General American	Wayne	Heidinger-Vogel	11-57	McClosky
1501	Dale C	Inland Producers	Hamilton	N. Rural Hill U	2-52	Aux Vases
1502	Dale C	Phillips	Hamilton	Cantrell U	8-55	Aux Vases
1503	Dale C	Phillips	Hamilton & Saline	West End U	1-56	Aux Vases
1504	Dale C	Texas	Hamilton	W. Dale U	7-51	Aux Vases
2002	Divide E.	Gulf	Jefferson	Holloway	5-55	McClosky
1903	Dundas E.	Gulf	Jasper	Bessie	5-54	McClosky
3407	Dundas E.	Gulf	Richland	E. Dundas U	10-56	McClosky
1934	Dundas E.	Sohio	Jasper	Dundas E.*	4-55	Ohara
1037	Ellery E.	Herndon	Edwards		12-57	A. V. & Ohara
4202	Enfield S.	Ryan	White	S. Enfield U #2	9-56	McClosky
1301	Frankfort W.	Shell	Franklin	W. Frankfort	11-57	Tar Springs
4123	Goldengate C	Cities Service	Wayne	Goldengate	8-56	Rosi. & Ohara
4124	Goldengate C	Cities Service	Wayne	Kletzker U	8-56	Aux Vases
3600	Harco	Phillips	Saline	Noble "A"	6-57	Aux Vases
4210	Herald C	C. E. Brehm	White	Herald W.	1-55	Waltersburg
1405	Herald C	Calvert	Gallatin	Cottonwood N.	12-57	Cypress
4211	Herald C	Mabee-Allen	White	Ackerman U	2-56	Aux Vases
4212	Herald C	O. B. Mitchell	White	Bayley U	9-57	Cypress
1101	Hill E.	Partlow & Cochonour	Effingham	Cypress	10-57	Cypress
320	Ingraham	Carter	Clay	Ingraham	12-56	Rosiclare
1406	Inman E. C	Carter	Gallatin	Big Barn	4-54	U. Cypress
1407	Inman E. C	Carter	Gallatin	Kerwin-Craw.	6-55	Chester
1408	Inman E. C	Carter	Gallatin	West U	7-56	Waltersburg
						Cypress
						Hardinsburg
1409	Inman E. C	Natural Resources	Gallatin	Big Barn	3-54	Tar Springs
1410	Inman E. C	Natural Resources	Gallatin	Big Barn	3-54	Cypress
1411	Inman E. C	Sun	Gallatin	Inman East	3-54	Tar Springs
1400	Inman W. C	Ferral*	Gallatin			Aux Vases
1401	Inman W. C	Gallagher	Gallatin	Bradley U	10-57	Biehl
1402	Inman W. C	Gulf	Gallatin	W. Inman U	5-55	Cypress
1403	Inman W. C	Gulf	Gallatin	W. Inman U	3-57	Tar Springs
1404	Inman W. C	Phillips	Gallatin	Levert	5-57	Cypress
303	Iola	Tidewater	Clay	Cora Davis	10-57	Bethel & A.V.
304	Iola	Tidewater	Clay	Dee & Heirs	10-57	Bethel & A. V.
4001	Irvington	Kapp*	Washington			Cypress
4002	Irvington	Mazzarino*	Washington			Cypress
203	Johnson N.	Bass & Hamman*	Clark	N. Johnson	1-53	Casey
204	Johnson N.	C. L. McMahon*	Clark	Block "A"	4-49	Casey

(Continued)

Information				Production and injection statistics (thousand bbls.)						Map No.
Location		Curtailed during '57		Secondary recovery						
				Water injection		Oil production		Water production		
Sec.	T.-R.	Inj.	Prod.	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	
30-33, 25	1S- 6E	x	x	2,633	8,519*	284.5	598	1,143	1,732	4110
19, 20, 28, 29	1S- 7E									
21	1S- 7E									4111
24	3N- 7E			35	169	2.1	79	35	448	301
15, 21, 22, 28	2N- 8E			437	437	111.3	115	10	10	302
32, 33, 34	4N- 9E			3,987	16,206	369.4	904	1,644	2,981	3494
4, 5, 8, 9	4N- 9E									
30, 31	3N- 9E			263	263	8.4	8	17	17	3405
11, 12	2N- 8E			215	215	10.3	10	17	17	3406
3	1N- 7E			1,768	3,984	448.7	652	250	406	4112
27, 34, 35	2N- 7E									
25, 26, 35, 36	2N- 7E			1,280	1,548	32.4	55	4	5	4113
14, 15, 22, 23	1N- 8E			1,166	8,135	100.9	343	782	1,954	4114
13, 14, 24	7N-10E			173	849	26.4	138	41	116	1901
23, 26	7N-10E			407	2,076	72.1	328	135	419	1902
9	2S- 8E			186	408	47.4	52	14	16	4115
16	2S- 8E			515	2,047	94.6	256	309	595	4116
22	2N- 8E			77	77	37.9	38	14	14	4117
13	1S- 7E			255	255	1.1	1			4118
16, 17	1N- 7E			317	869	88.1	226*			4119
21	6S-10E			98	260	3.2	11	19	57	4205
21	6S-10E			110	587	3.5	19	22	137	4206
21	6S-10E			101	1,331	8.8	83	97	1,117	4207
10	6S-10E			82	295	8.9	47			4208
14, 15, 22, 23	3S- 3W	x	x	919	8,661	82.4	2,222	1,073	6,216	4000
13	2S- 6E			12	12					4120
5, 6, 7, 8	6S- 6E			170	3,373	11.9	293*	117	1,536*	1501
5, 6, 7	7S- 5E	x	x	248	690	61.9	97	140	166	1502
17, 19, 20	7S- 5E	x	x	264	488	33.6	48	83	95	1503
11	6S- 6E			410	2,615	66.1	330	259	928	1504
21	1S- 4E	x	x	253	414	23.9	27	112	117	2002
23	5N-10E	x	x	80	353	15.1	31	77	118	1903
25, 26, 35, 36	5N-10E	x	x	129	169	2.5	3	1	1	3407
14	5N-10E	x	x	298	914	24.2	89	184	530	1904
27, 34	2S-10E			A.V.-11	11	None	None			1007
				0- 7	7					
28, 29	5S- 8E			131	178	15.3	15*	19		4209
18, 19	7S- 3E			67	67	0.8	1	1	1	1301

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,200	14.0			39.0			4110
2,990	30.0	14.0	2,000	38.5		*No data available.	4111
2,639	15.0	18.0	65			*Previously affected by dump flood. Surface injection began 7-53.	301
2,930	10.0			36.0			302
2,975	5.0	13.0					3404
2,984	6.5						3405
2,950	14.6	19.0	73	35.0		Previously subjected to gas injection.	3406
2,950	15.5	19.0	106	37.0		*Includes dump flood previously operated by I. J. Neal.	4112
						Previously subjected to gas injection.	4113
3,070	10.0	13.0		36.0			4114
2,530	6.2	14.0		39.8	3.7 @ 100°F		1901
2,580	8.2	14.0		39.8	2.9 @ 92°F		1902
3,150	8.0	19.0	115	39.0	3.7 @ 100°F		4115
3,200	14.8	20.0	80	39.0	3.7 @ 100°F		4116
2,639	12.5	16.5	43	34.4	6.8 @ 60°F	*Two of these completed in 6-57.	4117
3,065	15.9	19.0	85	38.7	3.4 @ 90°F	*Pilot flood.	4118
3,000	6.0	19.0		38.0		*Since 1-1-56.	4119
3,003	16.0					*Dump flood.	4205
2,950	30.0	15.0	300	36.5			4206
2,960	30.0	15.0	200	36.5			4207
2,950	12.0	21.1	218	35.1	5.0 @ 103°F		4208
1,230	14.0	20.0	250	37.0		*Cooperative: Shell, Magnolia, McBride, Horton.	4000
3,316	4.0						4120
3,125	14.7	23.9				*Cumulative since 1-1-53.	1501
3,200	15.0	18.0	75	38.0			1502
3,150	15.0	18.0	75	36.5			1503
3,050	14.0	17.0	125	38.0		Previously subjected to gas injection.	1504
2,805	6.9	18.0		36.6	3.35 @ 97°F		2002
2,941	14.0	16.6	775	37.8	2.47		1903
2,985	6.0	12.5		41.4			3407
2,900	8.0					*Dump flood using Cypress water.	1904
3,385	5.0	10.5	22		2.5 @ 103°F	*Includes primary production since 1-1-57.	1007
2,050	31.3	17.1	155	37.4			4209
3,260	15.0	15.0	13	36.0			1301
3,242	10.0	15.0	10				4123
2,890	12.0	22.0	100	38.5			4121
1,866	20.0	19.5	200	38.0	3.5 @ 60°F		3600
2,650	12.0	15.0	17			*Includes primary production.	4210
2,913	23.0					*Corrected figure. †Includes primary production since 1-1-57.	1405
							4211
2,715	15.0	14.9	58	39.0			4212
	12.0			38.0			1101
3,000	5.1	14.2	2,450				320
2,400	5.9	16.5	58	36.4	4.2 @ 92°F		1406
1,670	14.0	15.5-19.6	75-959				1407
2,000	4.5-11.0	16.5-19.6	5-109			*Includes 20,920 bbls. accumulated at start of flood.	1408
2,100	15.0	17.5	137	37.7	3.6 @ 63°F	*Includes primary production since start of flood.	1409
						†As of 12-31-56.	
2,400	9.6	16.8	50	38.0	3.6 @ 63°F	*As of 1-1-57.	1410
2,100	29.0	17.9	133	35.5			1411
						*No data available.	1400
1,726		15.0	72	36.9	5.4 @ 80°F		1401
2,500	16.5	13.5	40	38.6			1402
2,180	11.0	13.0		36.1			1403
2,560	6.0	18	100	35.0			1404
2,300	24.0			37.0		*Two zones.	303
2,300	25.5			37.0		*Two zones.	304
						*No data available.	4001
						*No data available.	4002
400	22.0	19.2	225	33.0	13.6	*No 1957 data available.	203
450	10.0-30.0	20.8	399	33.9	19.0	Previously subjected to gas injection.	204

TABLE 13.—

Map No.						General
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
205 Johnson N. 206 Johnson N. 207 Johnson N.	C. L. McMahon* Oldfield* Pure	Clark Clark Clark	Block "B" V. Jones N. Johnson	5-51 9-51 11-57	Casey Casey Claypool, Casey, U. Partlow	
208 Johnson N. 209 Johnson S. 210 Johnson S. 211 Johnson S.	Tidewater Forest Pure Pure	Clark Clark Clark Clark	Clark #1 S. Johnson Johnson Ext. #1 Johnson Ext. #2	2-50 3-49 1-54 11-55	Casey U. Partlow U. Partlow Claypool, Casey, U. Partlow	
212 Johnson S. 213 Johnson S. 4121 Johnsonville C	Pure Pure Texas	Clark Clark Wayne	Pure-Kewanee Weaver-Bennett Johnsonville U	1-54 1-53 10-56	U. Partlow U. Partlow Aux Vases	
4122 Johnsonville C	Texas	Wayne	Johnsonville U	11-54	McClosky	
1412 Junction 3915 Keensburg S. 4125 Keenville 4126 Keenville 305 Kenner	Alco† White & Vickery Calvert W. Duncan Texas	Gallatin Wabash Wayne Wayne Clay	Junction A. P. Garst Keenville U Keenville U Kenner U	5-51 10-54 11-56 4-54 11-57	Waltersburg Cypress McClosky Aux Vases Benoist	
306 Kenner W. 3916 Lancaster S. 2201 Lawrence 2212 Lawrence	Phillips Ashland Baldwin & Baldwin* Bradley	Clay Wabash Lawrence Lawrence	W. Kenner Lancaster S. C. M. Perkins	2-52 1-55 10-57 2-55	Ben. & Cyp. Bethel Bridgeport & Paint Creek Bridgeport	
2203 Lawrence 2204 Lawrence 2205 Lawrence 2206 Lawrence 2207 Lawrence 2208 Lawrence 2209 Lawrence 2210 Lawrence 2211 Lawrence 2212 Lawrence	Bradley Dearborn‡ W. Duncan T. W. George* W. W. Holden W. C. McBride W. C. McBride W. C. McBride Murphy Murphy	Lawrence Lawrence Lawrence Lawrence Lawrence Lawrence Lawrence Lawrence Lawrence Lawrence	C. M. Perkins Applegate L. C. David Klondike Gray Crump "40" Crump-Pyffe Neal Stoltz Stoltz	2-55 9-52 8-56 6-52 5-53 4-56 12-56 6-56 1-55 1-55	Kirkwood Cyp. & Jackson Paint Creek Bethel Jackson, Bethel & Renault Kirkwood Kirkwood Paint Creek & Kirkwood Bridgeport Kirkwood	
2213, 2219- 2223 Lawrence 2214, 2224- 2228 Lawrence 2216, 3416- 3417 Lawrence	Ohio Ohio Ohio	Lawrence Lawrence Lawrence & Richland	6 projects* 6 projects* 3 projects* Thorn S. Bridgeport U*	52 48 11-48	Kirkwood & Paint Creek Bridgeport McClosky	
2215 Lawrence 2217 Lawrence 2500 Livingston 2501 Livingston 1200 Loudon 1201 Loudon 1202 Loudon	Ohio Shakespeare W. H. Krohn Cahill & Smith J. P. Babcock W. L. Belden W. L. Belden	Lawrence Lawrence Madison Madison Fayette Fayette Fayette	 S. Bridgeport U* C & O Henke Rhodes & McCloy Hinton	 10-56 7-54 5-52 1-54 9-56 10-57	Kirkwood & Paint Creek Benoist Penn. Penn. Paint Creek & Bethel Cypress Cypress	
1233 Loudon 1204 Loudon 1205 Loudon 1206 Loudon 1207 Loudon 1208 Loudon 1209 Loudon 1210 Loudon	Burtschi Carter Doran General American Jarvis Bros. & Marcell Jarvis & Marcell B. Kidd Kingwood	Fayette Fayette Fayette Fayette Fayette Fayette Fayette Fayette	D. L. Burtschi Louden Stewart & Dial Devore Coop. Homan Yakey Louden Yolton	10-53 10-50 7-57 7-57 3-54 11-57 9-54 8-57	Cypress Chester Cypress Weiler Cypress Cypress, Benoist Weiler Cypress	
1211 Loudon	Kingwood	Fayette	Yolton	8-57	Paint Creek	
1212 Loudon	J. A. Lewis	Fayette	Louden Extension	12-55	Cypress	

Information			Production and injection statistics (thousand bbls.)						Map No.
Location		Curtailed during '57	Secondary recovery						
			Water injection		Oil production		Water production		
Sec.	T.-R.	Inj. Prod.	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	
35, 36 1, 3 10, 11, 14, 15	10N-14W 9N-14W 9N-14W		39‡	1,118‡	1.9‡	59‡		338‡	205 206 207
2 27, 34, 35 23, 26 23, 26	9N-14W 9N-14W 9N-14W 9N-14W		223 3,718 1,733 1,566	1,996 27,188 6,633 2,995	10.5 112.6 88.0 79.4	121 912 456 96	172 1,549 401	1,223 4,354 426	208 209 210 211
22, 27 27 21, 26, 27, 28, 33, 34, 35	9N-14W 9N-14W 1N- 6E		535 753 1,179	1,980 6,654 1,463	19.3 28.5 21.5	120 436 22	478 1,018 55	1,120 4,666 55	212 213 4121
21, 26, 27, 28, 33, 34, 35 3, 4 16 27 27, 28, 33, 34 28, 29 25 19, 30 23 21 6 32	1N- 6E 1S- 6E 9S- 9E 2S-13W 1S- 5E 1S- 5E 3N- 5E 3N- 6E 3N- 5E 1N-13W 3N-12W 4N-12W		2,877 187 202 375 182 1,666 26 523‡	9,771 1,122 222 1,262 182 7,122 76 866‡	273.9 27.6 31.1* 57.8 1.4 58.3 8.8 187.4	818 221‡ 34* 272* 1 277 26* 290*	1,304 124 33 176 18 294 261	3,778 432 43 309 18 850 2201 657‡	4122 1412 3915 4125 4126 305 306 3916 2201 2232
32 7 8 25, 26, 35, 36 13 19 31 29 32 32	4N-12W 4N-12W 3N-11W 5N-13W 4N-13W 4N-12W 4N-12W 4N-12W 4N-12W 4N-12W	x x x x x x x x x x	761 401 21 358 379 311 300 252 431	1,432 843‡ 30 1,015* 529 317 463 690 1,118	* 11.6 None 42.8 51.9 2.6 28.8 * 85.5*	* 22 None 127‡ 72 3 32 * 275*	* 4 4 139 71 3 14 * 324*	* 4* 2205 2205 2207 2208 2209 2210 2211 2212	
17 20, 29, 30 17 17, 20 27, 34 32 24, 25	3N-12W 3N-12W 6N- 6W 6N- 6W 8N- 3E 7N- 3E 8N- 3E	x x x x x x x	274 24 45‡ 249 57 52	325 77 360‡ 1,439 69 52	12.8 None 17.6* 95.1 2.8	13 3 232* 351* 3	3 346	2213, 2219- 2223 2214, 2224- 2228 2216, 3416- 3417	
18 6 1 29, 32 6 8 7 12 7 12 2, 3 34, 35, 36	7N- 3E 7, 8N-3E 7N- 3E 7N- 2E 7N- 3E 7N- 3E 7N- 3E 7N- 3E 7N- 2E 7N- 3E 8N- 3E 7N- 3E	x x x x x x x x x x x x	40 34,737 35 22 1,173 48 54 72 19 2,397	265 138,387 35 22 1,529 48 228 72 19 4,702‡	8.2 7,527.9 4.5* 270.2 1.8 15.1 7.2 0.3 1,256.2	99 21,010 5* 280 2 52* 7 1 1,675*	6,675 1 242 12 77 4 2 856	16,743 1 300* 12 169 4 2 1,149	1203 1204 1205 1206 1207 1208 1209 1210 1211 1212

TABLE 13.—

Map No.	Development as of 12-31-57						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Av. well-head pressure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
205	18	12	5-Spot	4.4	80					420
206										
207	77		5-Spot	4.5				B	6.5	200
208	17	25	5-Spot	4.4	81	102			2.2	832
209	86	75	5-Spot	4.4	400		Prod	B	2.5	293
210	66	60	5-Spot	5	243	243	Prod	B	2.1	245
211	69	56	5-Spot	4.5	234	234	Prod	B	0.9	245
212	20	13	5-Spot	4.4	54	67	Prod	B	3.7	245
213	36	24	5-Spot	4.4	114	151	Prod	B	1.6	245
4121	19	65		10	1,200	2,110	Penn. & Prod	B	22.7	553
4122	18	80	Perimeter	20	3,400	3,400	Weiler & Prod	B	43.8	
1412	11	7	Mod. 5-Spot	10	263	263	Shallow Sd	F	3.3	1,000
3915										
4125	3	12	Peripheral		180	220	Penn. Sd	B	20.5	485
4126	3	9	Perimeter		120	120	Shallow Sd	F	26.2	1,600
305	22	19	5-Spot		715	715	Penn. Sd & Prod	B	1.6	511
306	12	15	Mod. 5-Spot	10	329	329	Penn. Sd & Prod	B	14.6	703
3916	1	3		30	30	30	Tar Springs	B	7.2	713
2201										
2202	17	15	5-Spot	10	80	100	Prod	B	4.4	
2203			5-Spot	10	80	100	Prod	B	5.3	
2204	4	1	5-Spot	10		225	Gr Bed	F	12.5	600
2205	1	1		10	20	10	River Gr	F	9.5	1,100
2206										
2207	9	13	5-Spot	10	130	258	Penn. Sd	B	2.6	555
2208	9	5	5-Spot	10	40	40	River Gr	F	4.6	
2209	9	7	5-Spot	10	60	70	Buchanan Sd & River Gr	F & B	4.3	
2210	4	4	5-Spot	10	40	80	Buchanan Sd & River Gr	F & B	4.6	
2211	9	10	5-Spot	3	25	25	Gr Bed & Prod	F & B	3.1	394
2212	10	8	5-Spot	3	25	25	Gr Bed & Prod	F & B	6.6	355
2213,										
2219-										
2223	224	247	5-Spot	10	2,145		Gr Bed & Prod	F & B		
2214,										
2224-										
2228	173	262	5-Spot	10	1,614		Prod	F & B		
2216,										
3416-										
3417	13	35	Line, Dump	7	455		Prod & Cypress	F & B		
2215										
2217	7	9	Mod. 5-Spot	23	210	514	Tar Springs	B	8.9	91
2500	2	5				80	Ben. & A. V.	B	2.2	700
2501	5	10				40	Salem	B		450
1200	8	9	5-Spot		140	170	T. S. & Prod	B	3.4	
1201	1	1	5-Spot		20	10		B	7.8	
1202	4							B	9.6	150
1203	1	3		10	20		Purchased*	B	3.7	
1204	395	778	5-Spot & Sun-flower		11,131	13,637	Tar Springs	B	8.0	635
1205	2	4	5-Spot		40	40	Tar Springs	B	4.8	100
1206	1	3		10	80	80	Prod & Purchased†	B	12.5	
1207	16	18	5-Spot	20	324	400	T. S. & Prod	B	5.7	56
1208	4	6	5-Spot	20	78	78	Tar Springs	B	4.0	None
1209	1	4	5-Spot	20	40	50	Tar Springs	B	5.5	485
1210	4	4	5-Spot	20	85	85	Tar Springs	B	1.6	
1211	1	1	5-Spot	20	40	40	Tar Springs	B	1.8	
1212	46	48	5-Spot	20	1,000	1,000	Tar Springs	B	8.9	383

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
480	22.0	18.3	66	33.0	10.0 @ 70°F	Previously subjected to gas injection. *Sold to Frank Bridges, 5-57. †Through 4-30-57. ‡Cumulative to 12-31-56, water production 4-55 through 12-55 not included.	205
408	24.0, 19.0	19.5	300			*No 1957 data available.	206 207
425	17.0	20.6	415	33.9	10.7 @ 70°F	Subjected to gas injection 1946-7.	208
490	48.0	16.6	319	29.2	14.7 @ 77°F	Previously subjected to gas injection.	209
465	35.0	18.9	312	29.7	21.0 @ 65°F		210
420	19.0, 15.0, 30.0	20.6	294				211
507	33.0	18.2	277	29.7	25.5 @ 65°F	Previously subjected to air injection.	212
467	35.5	18.6	285	29.7	25.5 @ 65°F		213
3,000	7.5	19.1	187	37.0			4121
3,100	10.0	15.5	850	38.0			4122
1,750	14.0	13.4	22	34.7	6.7 @ 81°F	†Now Lewis Eng. ‡Includes primary production since 11-1-51.	1412
2,403	15.0	20.6	134	37.5	4.6 @ 91°F	*No 1957 data available.	3915
3,100	9.0					*Includes primary production since 11-1-56.	4125
2,950	13.0	20.0	155	39.0	3.5 @ 97°F	*Includes primary production since start of flood.	4126
2,700	14.0	15.6	54				305
2,600	26.0	18.0	125	37.5			306
2,520	10.0					*Includes primary production since start of flood.	3916
						*No data available.	2201
900	19.0	18.0	125	36.0	6.1 @ 60°F	*Includes primary production since start of flood. ‡Includes six line wells with Ohio.	2202
1,375	23.0	14.2	28	36.0	6.1 @ 60°F	*Included in Bridgeport production.	2203
1,320	22.7	20.1	62	34.7	4.3 @ 81°F	*As of 1-1-55. ‡Formerly operated by H. W. Sherrill. §Data for 1955 is not included.	2204
1,600	6.0						2205
1,625	18.0	17.2	60	37.8	5.2 @ 80°F	*No 1957 data available.	2206
J-1, 428	8.0	18.4	95	38.0	5.0 @ 85°F	*Corrected figure. ‡Includes primary production since start of flood. §Last 5 mo. estimated.	2207
R-1, 632	15.0	18.5	17				
B-1, 611	14.5	14.6	13				
1,280	25.0	21.0	90			*Since 1-1-57.	2208
1,420	22.0	20.0	80				2209
1,390	45.0	16.5	60				2210
860	25.0	22.3	148	37.0		*Included in production from Kirkwood Formation.	2211
1,400	18.5	17.3	18	37.0		*Includes production from Bridgeport Formation. Corrected figures.	2212
		20.0				*Westall, Middagh, Boyd, Sutton, Kimmel, Thorn.	2213, 2219- 2223
		20.0				*Robins, Johnson, Cooper, Gee, Lewis, Clark. Previously subjected to gas injection.	2214, 2224- 2228
3,150						*Gillespie (2216), Arbuthnot-Shillingis (3416), Parkersburg Unit (3417). Previously subjected to gas injection.	2216, 3416- 3417
1,800	12.1	17.1	68	38.0	6.0 @ 84°F	*Pilot flood.	2215
520	15.0			33.5			2217
550	15.0						2500
1,550	25.0			38.0		*Includes primary production. ‡Estimated.	2501
						*Includes primary production since start of flood. Previously subjected to gas injection.	1200
1,584	20.0	17.4	126	34.0			1201
1,530	15.0			34.0			1202
1,492	30.0					*Water supplied by Carter. Previously subjected to gas injection.	1203
1,500	30.0	20.0	105	38.0	2.6		1204
1,522	20.0	19.0	120	32.4			1205
1,454	10.0	18.0	43	38.7	5.2 @ 80°F	*Total production. ‡Produced, from Weiler sand; purchased from Carter.	1206
1,560	35.0	18.0	200	36.0		*Since 1-1-56.	1207
1,450	C-20.0 B-30.0	19.0	130			Previously subjected to gas injection.	1208
1,450	27.0			38.0		*Corrected figure.	1209
1,504	30.0						1210
1,572	29.0						1211
1,550	16.0	20.0	200	38.0	5.0 @ 60°F	*Includes primary production since start of flood. ‡Corrected figure.	1212

TABLE 13.—

Map No.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
1213 Louden		J. J. Lynn Estate	Fayette	E. C. Smith	7-57	Cypress
1214 Louden		Mabee	Fayette	Louden	8-55	Cypress
1215 Louden		Mabee	Fayette	Louden	5-57	Cypress
1216 Louden		Magnolia	Fayette	Rhodes-Watson Coop.	8-57	Cyp., P.C. & Ben.
1217 Louden		W. C. McBride	Fayette	Stokes Weiler	3-56	Weiler
1218 Louden		Shell	Fayette	N. Louden U	11-56	Cypress
1219 Louden		Shell	Fayette	S. Louden U	3-55	Cypress
1220 Louden		R. H. Troop	Fayette	Durbin Area	8-56	Cypress
1221 Louden		R. H. Troop	Fayette	Hiatt U	9-56	Cypress
602 Main C		Ashland	Crawford	Birds #1	5-54	Robinson
603 Main C		Ashland	Crawford	Birds #2	3-57	Robinson
634 Main C		Bell Bros.	Crawford	Barrick	10-54	Robinson
605 Main C		Calvan American*	Crawford	Bishop	11-53	Robinson
606 Main C		Calvan American**	Crawford	Grogan	10-53	Robinson
607 Main C		Calvan American	Crawford	Mitchell	6-53	Robinson
608 Main C		W. Duncan	Crawford	Tohill-Hughes-Robinson		Robinson
659 Main C		E. Constantin*	Crawford	Sanders	8-52	Robinson
609 Main C		E. Constantin*	Crawford	J. S. Kirk	8-51	Robinson
610 Main C		E. Constantin*	Crawford	Smith	3-54	Robinson
611 Main C		Forest	Crawford	Oblong	8-56	Robinson
612 Main C		D. W. Franchot	Crawford	Birds	6-51	Robinson
613 Main C		General Operations*	Crawford	Culver	2-53	Robinson
614 Main C		General Operations*	Crawford	Little John	10-52	Robinson
660 Main C		General Operations*	Crawford	Culver Extension	3-54	Robinson
615 Main C		G. M. J.*	Crawford	Porterville	5-54	Robinson
616 Main C		Hardinville	Crawford	Tohill & Hughes	6-51	Robinson
617 Main C		Kewanee	Crawford	Wright	1-53	Robinson
618 Main C		A. J. Leverton*	Crawford	Stanford	6-52	Robinson
619 Main C		Logan	Crawford	Alexander-Reynolds	12-51	Robinson
620 Main C		Mahutska*	Crawford	Oil Center	5-54	Robinson
621 Main C		Mahutska*	Crawford			Robinson
622 Main C		Mahutska*	Crawford			Robinson
623.						
646-						
658 Main C		Ohio	Crawford	14 projects*	48	Robinson
624 Main C		Partlow & Cochonour	Crawford	Rich	10-54	Robinson
625 Main C		Red Head*	Crawford	"D. I. M."	7-53	Robinson
626 Main C		E. C. Reeves	Crawford	Billingsley	12-53	Robinson
627 Main C		Shakespeare	Crawford	McIntosh U	7-54	Robinson
628 Main C		Shakespeare	Crawford	Montgomery U	5-54	Robinson
629 Main C		Tidewater	Crawford	Clark-Hulse	1-52	Robinson
630 Main C		Tidewater	Crawford	Birch #1	8-54	Robinson
631 Main C		Tidewater	Crawford	Birds Area	2-52	Robinson
632 Main C		Tidewater	Crawford	Barrick-Walters	3-54	Robinson
633 Main C		Tidewater	Crawford	Good	9-52	Robinson
634 Main C		Tidewater	Crawford	W. A. Howard	2-52	Robinson
635 Main C		Tidewater	Crawford	Ames	9-57	Robinson
636 Main C		Tidewater	Crawford	Dennis-Hardin	8-50	Robinson
637 Main C		Tidewater	Crawford	G. L. Thompson	9-52	Robinson
638 Main C		Tidewater	Crawford	Henry-Ickmire	2-48	Robinson
639 Main C		Tidewater	Crawford	Lefever-Musgrave	2-54	Robinson
640 Main C		Tidewater	Crawford	Montgomery-Seitzinger	5-54	Robinson

(Continued)

Information				Production and injection statistics (thousand bbls.)							Map No.
Location		Curtailed during '57		Secondary recovery							
				Water injection		Oil production		Water production			
Sec.	T.-R.	Inj.	Prod.	Total 1957	Cumu- lative 12-31-57	Total 1957	Cumu- lative 12-31-57	Total 1957	Cumu- lative 12-31-57		
20	7N- 3E			61	61	24.1	24			1213	
29	7N- 3E			168	355	95.2	139*	107	174*	1214	
30	7N- 3E			83	83	None	None			1215	
27, 33, 34	8N- 3E			19	19	7.7	8	151	151	1216	
14	8N- 3E			228	356	8.0	8	1	1	1217	
20, 21	7N- 3E	x	x	1,779	1,920	463.5	464	227	230	1218	
21, 28, 29	7N- 3E	x	x	1,338	3,387	416.5	861	619	1,167	1219	
24, 26	8N- 3E	x	x	120	145	25.7	26*			1220	
29	7N- 3E	x	x	219	267	61.1	62			1221	
9, 10, 15, 16	5N-11W			2,331	10,257	77.0	287	42	1,294	602	
20	5N-11W			127	127	1.9	2			603	
13	7N-13W			57	165					604	
20	8N-12W			407	1,428	4.5	16‡		41	605	
4, 9	7N-13W				303*		2*			606	
24, 25	7N-13W			144	604	15.1	56‡		31*	607	
27, 28	6N-13W									608	
1, 2, 3	5N-13W									609	
26, 34, 35, 36	6N-13W									610	
29, 30, 31, 32	7N-12W									611	
7	7N-12W									612	
12	7N-13W									613	
5, 8, 9	7N-13W			978	1,258	41.4	59*			614	
21, 22	5N-11W			2,502	12,448*	146.6	681*	200	800	615	
5, 6, 7	7N-12W			224	1,373‡	1.7	4‡	38	104‡	616	
20	6N-12W			142	259‡	8.8	19	50	61	617	
18	7N-12W									618	
25, 36	8N-13W									619	
28	6N-13W				2,313*		139*		413‡	620	
23, 26	6N-13W			499	1,966	5.5	9	102	375	621	
20	7N-12W			530*	2,145	39.4	222	180*	535	622	
10, 14, 15	6N-13W									623	
2, 3	7N-13W									624	
27	6N-13W									625	
				18,871	66,267	1,028.9	4,934	6,446	24,356	626	
35, 36	6N-12W			487	794	13.9	29	244	361	627	
25, 26	6N-13W			396	2,017	12.5	49‡			628	
34, 35	7N-13W			336	1,748	14.4	50	9	23	629	
17, 18, 19, 20	6N-12W			118	281	6.0	15	87	163	630	
32, 33	6N-12W			171	443	5.9	16	79	145	631	
4	5N-12W									632	
18	7N-13W			417	1,804	26.8	188	296	833	633	
14	6N-13W	x		253	625*	29.5	89	18	44	634	
16, 20, 21	5N-11W			1,054	2,378	69.0	214	300	1,262	635	
19	7N-12W			624	1,329	23.7	72	18	78	636	
16	6N-13W			16	16	None	None	0.1	0.1	637	
11	7N-13W	x		140	532	7.8	38	46	213	638	
				11	11	0.6	1	5	5	639	
27, 34	6N-13W			381	2,938	50.3	502	313	1,737	640	
26, 27	6N-13W			150	909	21.2	80	81	231	641	
10, 15	7N-13W			367	3,348	20.2	410	284	1,701	642	
13	7N-14W			142	560	52.0	145	17	52	643	
15, 16	5N-11W			151	383	10.6	19	30	80	640	

TABLE 13.—

Map No.	Development as of 12-31-57						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Av. well-head pressure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
1213	3	7		35	100	100	Purchased*	B	5.5	None
1214	4	4	5-Spot		80	80	Tar Springs	B	4.2	None
1215	3	6	5-Spot		80	80	Tar Springs	B	3.8	None
1216	6	9	5-Spot		110	250	T. S. & Prod	B	0.7	
1217	3	3	5-Spot	20	60	60	Tar Springs	B	8.3	None
1218	20	21	5-Spot	10	250	250	Tar Springs	B	11.6	116
1219	20	21	5-Spot	20	350	590	Tar Springs	B	10.2	63
1220	2	4			50		Tar Springs	B	5.4	
1221	2	3	5-Spot	20	40	40	Tar Springs	B	7.5	None
602	67	53	5-Spot	10	530	580	Penn. Sd	B	3.2	630
603	3	2	5-Spot	10	20		Purchased	B	5.5	334
604	3	4	5-Spot		40	40	Cyp. & Prod	B	0.9	300
605	26	3	5-Spot	10	207	474	Penn. Sd	B	3.1	450
606	8	5	5-Spot	10	28	231	Penn. Sd	B		
607	13	18	5-Spot	10	62	240	Penn. Sd	B	5.8	450
608										
609										
610										
611	33	25	5-Spot	10	180	230	Gr Bed & Prod	F & B	3.9	508
612	81	71	5-Spot	10	740	1,600	River Gr	F	3.5	500
613	12	8	5-Spot	10	40	710	Lake	F	2.0	400
614	4	10	†	4.5	30	60	Penn. Sd	F & B	4.6	450
660										
615										
616	14	13	5-Spot	10	87	298	Shallow Sd	F		
617	15	34	5-Spot	10	113	210	Penn. Sd	B	6.1	541
618										
619	25	25	5-Spot		90	330	Cypress	B	2.6	420
620										
621										
622										
623, 646-										
658	460	615	5-Spot	10	3,360		Grouped Gr Bed & Prod	F & B		
624	5	9	Line	5	60	120	Lake & Prod	F & B	22.2	650
625	18	14	5-Spot	10	103		Upper Sd & Surface	F & B	6.6	400
626	6	7	5-Spot	10	115	350	Penn. Sd	B	7.7	321
627	4	8	Peripheral	4.7	39	88	Penn. Sd	B	6.7	314
628	6	6	Mod. 5-Spot	8	52	85	Lower Rob. Sd	B	3.1	603
629	14	19	5-Spot	7	80	98	Gr Bed	F	4.1	495
630	9	13	5-Spot	10	58	60	Gr Bed	F	5.5	270
631	24	41	5-Spot	10	220	277	Tar Springs	B	6.6	540
632	9	32	5-Spot	10	110	300	Mississippian	B	10.0	460
633	2									435
634	3	16	5-Spot	10	35	90	Gr Bed & Penn. Sd	F & B	3.7	457
635	1									550
636	10	15	5-Spot	10	94	93.5		F	3.0	350
637	4	7	5-Spot	10	40	40	Gr Bed	F	4.9	480
638	24	40	5-Spot	4.4	91	115	Gr Bed & Penn. Sd	F & B	3.0	450
639	10	14	5-Spot	10	35	110		F	2.0	470
640	5	7			40	40	Tar Springs	B	5.8	620

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
1,540	20.0	21.1	150	37.6	5.8 @ 79°F	*Purchased from Carter.	1213
1,550	30.0			36.0		*Includes primary production since 1-1-56. Corrected figures.	1214
1,550	30.0			36.0			1215
1,560							1216
1,480	25.0	19.4	93				1217
1,550	21.0	21.0	180	36.6	4.7 @ 60°F		1218
1,550	18.4	20.4	164	36.6	4.7 @ 60°F		1219
1,493	30.0			34.6		*Since 1-1-57.	1220
1,536	40.0	19.0	250	34.6			1221
950	30.0	21.0	136	31.0	15.0 @ 75°F		602
930	25.0	21.0	125	30.8		Previously subjected to gas injection.	603
960	56.0	19.2	126			Previously subjected to gas injection.	604
950	22.4	21.1	156	35.7	10.0 @ 78°F	†Includes primary production since 1-1-54. *Sold to Simons & Brittan, 8-20-57.	605
950	22.4	22.1	156	35.0	10.0 @ 78°F	*As of 12-31-56. †Sold to Forrest Oil.	606
880	22.0	23.8	94	33.2	10.0 @ 78°F	*As of 1-1-56. †Includes primary production since 1-1-53.	607
							608
800	20.0	21.0	205	32.0		Previously subjected to gas injection. *No 1957 data available.	659
900	50.0	17.0	170	34.0		Previously subjected to gas injection. *No 1957 data available.	609
900	25.0	18.0	70	34.0		Previously subjected to gas injection. *No 1957 data available.	610
950	21.0	19.5	77	33.0		*Includes production due to adjacent floods prior to start of flood.	611
950	24.0	18.9	162	21.7	21.0 @ 60°F	*Includes cumulative injection and secondary production of former Yingling flood.	612
950	25.0	22.7	101		10.0 @ 78°F	†As of 7-1-55. †Data for July through Nov. of 1955 not included. *Formerly operated by Ree.	613
850	24.0	20.0	50		10.0 @ 78°F	†Since 1-1-56. †New injection system completed 8-56. Previously subjected to gas injection. *Formerly operated by Ree.	614
945	14.0	20.8	154	32.4		*No 1957 data available. Presumed to be taken over by General Operations; formerly operated by Ree.	660
900	30.0	17.2	45	38.6		*No 1957 data available.	615
850	30.0	19.5	125	32.0	10.0 @ 80°F	*As of 12-31-56, 1-1-56 to 10-1-56 not included. †As of 1-1-56.	616
900	15.0	20.0	245			Previously subjected to gas injection.	617
977	30.0	23.0	57	36.0		*No 1957 data available.	618
940	22.0	20.5	167	36.0	7.0 @ 80°F	*Estimated.	619
925	20.0	19.0	175	33.0		Previously subjected to gas injection. *No 1957 data available.	620
		20.0				*No data available.	621
						*No data available.	622
						Previously subjected to gas injection. *Leases formerly known as Constantin, Jr., Short, J. A. & W. A. Wood, Hurst, P. & H. F. Dee, Wall, are contained in this total.	623, 646-658
1,006	12.0	24.3	240	26.0			624
830	10.0					Previously subjected to gas injection. †Since 1-54. *These wells sold to Frank T. Whittinghill, Jr. on 11-30-57.	625
925	20.0	30.0	45				626
900	12.0			32.6	11.0 @ 75°F	Previously subjected to gas injection.	627
975	25.8	22.6	150	28.3	23.0 @ 71°F		628
910	20.0	19.9	278	34.0		Subjected to gas injection since 1941.	629
881	14.0	19.1	108	32.0		*Corrected figure.	630
950	18.0	19.4	197	30.1		Subjected to gas injection 1946-52.	631
950	19.0	20.0	152	35.0	7.0 @ 60°F		632
							633
950	13.0	19.6	184	35.3		Subjected to gas injection 1935-53.	634
5							635
875	34.0	19.8	178	32.7		Subjected to gas injection 1932-50.	636
860	21.0	19.8	108	33.0			637
935	14.0	21.0	175	35.0	7.0 @ 60°F	Subjected to gas injection 1934-48.	638
910	20.0	20.0	250	34.0			639
979	14.0	19.0	144	32.0			640

TABLE 13. —

Map No.	General				
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection Formation
641	Main C	Tidewater	Crawford	Stifle-Drake	6-53 Robinson
642	Main C	Tidewater	Crawford	Stahl-Walters	11-54 Robinson
643	Main C	Wilson*	Crawford	Hughes-Walker	8-55 Robinson
644	Main C	Wiser*	Crawford	H. J. Musgrave	10-55 Robinson
645	Main C	Wyman*	Crawford		Robinson
1008	Maple Grove C	Ashland	Edwards	Bennington	9-52 McClosky
1009	Maple Grove C	Investment Oil*	Edwards	Graede & Miller	7-55 McClosky
4127	Maple Grove C	Winmar	Wayne	W. Bennington*	1-57 Aux Vases
2003	Markham City	Tidewater	Jefferson	Newton	8-55 McClosky
2004	Markham City W.	Gulf	Jefferson	Markham City W.	4-54 Aux Vases & McCl.
214	Martinsville	Froderman & Connelly	Clark	Froderman & Connelly	Partlow
500	Mattoon	Carter	Coles	Mattoon	5-52 Rosi. & Cyp.
501	Mattoon	Nokill*	Coles	Mattoon	11-50 Rosiclar
4213	Maunie S.	Magnolia	White	Palestine U	2-53 Palestine
1505	Mill Shoals	B. Kidd	Hamilton	Gardner	9-56 Aux Vases
1506	Mill Shoals	Sohio	Hamilton	B. R. Gray	5-52 Aux Vases
3917	Mt. Carmel	G. S. Engle*	Wabash	G. Dunkel	6-52 Biehl
3918	Mt. Carmel	First Nat'l Pet. Trust	Wabash	Wabash U	10-57 McClosky
3919	Mt. Carmel	T. W. George*	Wabash	N. Mt. Carmel	8-55 Cypress
3920	Mt. Carmel	T. W. George*	Wabash		Cypress
3921	Mt. Carmel	O'Meara Bros.*	Wabash	Mt. Carmel	7-54 Cypress
3922	Mt. Carmel	Shell	Wabash	Mt. Carmel U	7-54 Cypress
3923	Mt. Carmel	Skiles	Wabash	Chapman-Courter	1-55 Cypress
3924	Mt. Carmel	Skiles	Wabash	W. Mt. Carmel	10-55 Tar Springs
3925	Mt. Carmel	Texas	Wabash	Stein	2-52 Tar Springs
3926	New Harmony C	Ashland	Wabash	Maud N.	4-56 Benoist
3927	New Harmony C	Ashland	Wabash	Ravenstein	5-57 Benoist
4214	New Harmony C	Arrow*	White	*	9-56 Aux Vases
4215	New Harmony C	Arrow*	White	*	9-56 Benoist
4216	New Harmony C	Arrow*	White	*	9-56 L. Cypress
4217	New Harmony C	Arrow*	White	*	9-56 M. McClosky
4218	New Harmony C	Calstar	White	Ford	1-56 Aux Vases
4219	New Harmony C	Calstar	White	Ford "B"	3-53 Bethel
3928	New Harmony C	Cities Service	Wabash	Brines U	8-56 Benoist
4220	New Harmony C	Clark & Clark	White	Maunie N. U	9-57 Aux Vases
4221	New Harmony C	Coy*	White		Cypress & Aux Vases
3927	New Harmony C	T. W. George*	Wabash	E. Maud	7-52 Bethel
3947	New Harmony C	T. W. George*	Wabash	E. Maud	1-55 Cypress
4224	New Harmony C	Herndon & Ashland	White	Calvin	11-52 Aux Vases
4225	New Harmony C	Herndon	White	Calvin	Benoist
4226	New Harmony C	Herndon	White	Calvin	6-57 Cypress
4227	New Harmony C	Inland	White	Bowman's Bend U	12-53 Tar Springs
3936	New Harmony C	Luboil	Wabash	Helm	11-54 Cypress "A"
3937	New Harmony C	Luboil	Wabash	Helm	10-54 Cypress "C"
3938	New Harmony C	Luboil	Wabash	Helm	12-51 Aux Vases
3939	New Harmony C	Luboil	Wabash	Helm	12-51 Benoist
3940	New Harmony C	Luboil	Wabash	Helm	12-50 Waltersburg
3929	New Harmony C	Phillips	Wabash	Shultz Lease	7-51 Lower Cyp.
3930	New Harmony C	Phillips	Wabash	Shultz Lease	5-52 Upper Cyp.
4231	New Harmony C	Sinclair	White	M. S. Donald	10-56 Aux Vases
3931	New Harmony C	Skiles	Wabash & Edwards	Siebert Bottoms	10-51 Bethel
3932	New Harmony C	Skiles	Wabash	E. Maud	4-52 Bethel
3933	New Harmony C	Skiles	Wabash	E. Maud	11-52 Cypress
3934	New Harmony C	Skiles	Wabash	W. Maud	10-50 Bethel
3935	New Harmony C	Sohio	Wabash	Griffin N.	10-55 Cypress
4233	New Harmony C	Sun	White	Ford "B"*	3-53 Aux Vases
4234	New Harmony C	Sun	White	Ford "B"*	3-53 Bethel
4235	New Harmony C	Superior	White	Kern-Hon U	2-54 Tar Springs
4236	New Harmony C	Superior	White, Ill.	New Harmony U	11-56 Aux Vases
4237	New Harmony C	Superior	White, Ill. Posey, Ind.	New Harmony U	11-56 Bethel

(Continued)

Information				Production and injection statistics (thousand bbls.)						Map No.
Location		Curtailed during '57	Secondary recovery							
			Water injection		Oil production		Water production			
Sec.	T.-R.	Inj.	Prod.	Total 1957	Cumu- lative 12-31-57	Total 1957	Cumu- lative 12-31-57	Total 1957	Cumu- lative 12-31-57	
10	7N-13W			270	1,149	10.7	46	101	349	641
13, 14	7N-13W			51	167	18.1	37	43	103	642
26	6N-13W									643
18	7N-12W			173	366	0.4†	4‡			644
34	6N-12W									645
7	1N-10E			66	347	10.5	96*			1008
8, 9	1N-10E			†	†		8‡			1009
13	1N- 9E			37*	37*	7.4‡	7‡	7	7	4127
1	3S- 4E			†	†	1.0*	2*	7‡	7‡	2003
3, 4, 9, 10	3S- 4E	x	x	737	1,345	49.5	80	184	910	2004
13	9N-14W			720	2,160*	33.9	61‡			214
35	12N- 7E			1,227	5,541	158.9	374	747		500
22	12N- 7E									501
13, 18, 24	6S-10&11E			1,690	7,719	113.1	1,496*	1,761	5,115	4213
24	3S- 7E		x	*	*	3.5‡	4‡			1505
1	4S- 7E	x	x	233	1,421	19.9	286	152	494	1506
5	1S-12W			0.4	0.4	None	None	None	None	3917
4, 5	1S-12W									3918
32	1N-12W									3919
										3920
17	1S-12W									3921
17, 18	1S-12W	x	x	637	2,671	161.2	507	397	672	3922
7, 18	1S-12W			132	474	57.5	163	57	103	3923
18	1S-12W	x	x	127	257	10.4	66*	34	37	3924
5, 8	1S-12W			87	530	5.1	79	79	331	3925
5, 6, 7, 8	2S-13W			68	157	31.7	39*			3926
32	1S-13W			23	23	5.7	6			3927
32, 33	3S-14W			183	269	11.9	16			4214
5	4S-14W									
32	3S-14W			152	211	10.0	13			4215
33	3S-14W			130	176	8.5	11			4216
32, 33	3S-14W			342	405	22.4	30			4217
5	4S-14W									
21, 22	4S-14W			379	919	66.0*	129*			4218
21	4S-14W					95.3*	167*			4219
17, 20, 21, 28, 29	1S-13W			1,149	1,291	157.7	158	32	35	3928
18, 19	6S-14W			172	172	None	None			4220
17	4S-14W									4221
32, 33	1S-13W									3907
32, 33	1S-13W									3947
5, 8	4S-14W			977	3,026	164.2	403*			4224
8	4S-14W			370	671.8	*	*			4225
8	4S-14W			27	27	*	*			4226
15, 16, 21, 22	5S-14W			604	2,532	213.0	778*	330	937‡	4227
22	3S-14W			255	617	323.6*	2,307*	898*		3936
22	3S-14W			239	683	*	*	*		3937
22	3S-14W			594	2,490	*	*	*		3938
22	3S-14W			649	3,848	*	*	*		3939
22	3S-14W			296	1,630	*	*	*		3940
7	3S-14W			207	2,464	6.9	118	238	1,881	3929
7	3S-14W			79	789	0.5	42	15	329	3930
21, 28	4S-14W	x		199	241	3.0	3			4231
34	2S-14W			245	1,906	57.8	435	145	302	3931
2, 3, 10	3S-14W									
4, 5	2S-13W			137	719	37.3	180	42	129	3932
32, 33	1S-13W									
4, 5	2S-13W			148	590	13.3	69	38	232	3933
32, 33	1S-13W									
32	1S-13W			179	1,724	25.7	325	21	282	3934
5	2S-13W									
14	3S-14W	x	x	257	341	217.8	563*	257	341	3935
21	4S-14W			49	191	30.7	36	25	29	4233
21	4S-14W			99	430	4.0	50	71	192	4234
32, 33	4S-14W			139	665	57.3	316	59	183	4235
27, 33, 34	4S-14W			1,476	1,516	*	*	*	*	4236
27, 33, 34	4S-14W			2,855	6,519*	146.5	799*	658	4,836†	4237

TABLE 13.—

Map No.	Development as of 12-31-57						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Av. well-head pressure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
641	6	24	5-Spot	10	33	160	Penn. Sd	B	8.6	400
642	4	5			37	80	Gr Bed	F	0.2	466
643										
644	2	7	5-Spot		40	160	Purchased	F	7.9	320
645										
1008	1	6	Flank		110	110	Prod	B	36.0	
1009	1	2			20	118	540'-600' Sd	F		
4127	1	5			160	160	Cypress	B	6.7	773
2003	1	1		40	40	40	Cypress	B	0.4	
2004	12	13	Mod. 5-Spot	20	A. V.-25 Mc.-30	210 150	Cypress & Prod	B	4.5	A.V.-359 Mc.-120
214	50	42			240	500	Pond	F	1.6	300
500	29	34	5-Spot	20	461	610	Sewage Effluent & Prod	F & B	8.9	735
501										
4213	31	26	5-Spot	20	448	570	Gr Bed & Prod	F & B		
1505	1	2		10	30	30	Hardinsburg	B		
1506	8	7	5-Spot	20	170	170	Gr Bed	F	7.2	260
3917										
3918	1	2			30	60	Prod	B	0.6	
3919										
3920										
3921										
3922	20	27	5-Spot	20	325	570	Gr Bed*	F	6.7	440
3923	4	7	Peripheral		100	100	River & Prod	F & B	4.7	595
3924	3	3		10	70	40	Prod	B	19.3	1,351
3925	2	8	Flank		30	73	Shallow Sd & Prod	F & B	10.0	1,326
3926	5	10		20	137	150	Purchased	B	5.8	1,463
3927	1	2			20		Purchased	B	15.4	1,436
4214	9	11			163	323	River & Gr	F	3.9	755
4215	4	4	5-Spot	20	60	131	River & Gr	F	9.6	755
4216	3	5	5-Spot	20	45	165	River & Gr	F	13.3	748
4217	4	7	5-Spot	20	85	302	River & Gr	F	24.8	16
4218	7	7	5-Spot	10	95	215	Gr	F	8.0	1,200
4219	1	3		20	20	35	Gr	F		
3928	28	33	5-Spot	20	524	600	Penn. Sd	B	6.6	
4220	11	8		10	190	180	Well	F		None
4221										
3907										
3947										
4224	16	18	Line	10	200	250		F	5.6	729
4225	9	8		10	90	90		F	7.5	650
4226	3	7						F		847
4227	3	14	Peripheral		200	200	Gr Bed & Prod	F & B	28.3	449
3936	6	11			120		Gr Bed	F		1,000
3937	4	11			120		Gr Bed	F		1,200
3938	19	26			260		Gr Bed	F	7.0	1,200
3939	32	29			255		Gr Bed	F	3.9	1,200
3940	4	3			30		Gr Bed	F	8.1	900
3929	2	3		10	21	70	Upper Sd & Prod	F & B	14.2	644
3930	1	1		10	9	30	Upper Sd & Prod	F & B	21.5	644
4231	2	6	Peripheral		105	123	Well	F	9.7	543
3931	19	24	5-Spot	20	380	430	Gr & Prod	F & B	1.9	1,480
3932	9	17	5-Spot	20	250	280	Creek & Upper Sd	F	4.9	1,500
3933	2	9	5-Spot	20	20	100	Creek & Upper Sd	F	25.3	565
3934	12	13	5-Spot	20	340	430	Creek & Upper Sd	F	3.4	1,469
3935	1	12	Line		120	200	Prod	B	28.2	200
4233	1	5			20	80	Gr Bed	F	13.5	1,402
4234	1	4			40	20	Gr Bed	F	22.6	1,081
4235	3	5	Mod. Split Line		121	121	Gr Bed	F	9.5	1,168
4236	A.V.-9	81	5-Spot	20	2,029	2,029	Shallow & Prod	F & B		277
4237	Dual-45									
	B-28		5-Spot	20	2,576	2,576	Shallow & Prod	F & B		381
	Dual-45	133								

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
980	15.0	18.2	221	33.5		Subjected to gas injection since 1934.	641
987	19.0						642
880	25.0	19.0	83	32.0		Previously subjected to gas injection. *No 1957 data available.	643
1,010	30.0	21.1	334			*Operated by Tidewater. †Includes primary production 1-1-56 to 1-1-57. ‡Estimated.	644
						*No data available.	645
3,100	5.0			38.0		*Includes primary production since start of flood.	1008
3,275	5.0			36.0		*Sold to Illinois lease operating during 1957. †Dump flood. ‡Includes primary production since start of flood.	1009
3,150	15.0	24.0	50	37.0		*Pilot dump flood. ‡Includes primary production since 5-57.	4127
3,080	6.0					†Dump flood. *Estimated; includes primary production since 1-1-56. ‡As of 1-1-57.	2003
2,900	22.1		269		3.2 @ 99°F		
3,000	15.4		230	38.0	2.8 @ 104°F		2004
415 575	25.0	24.0	43	32.0		*Estimated injection since 1-1-56. ‡Includes primary production since 7-1-55.	214
C-1,750 R-1,950	13.0	16.0	84	39.0	1.7 @ 85°F		500
1,952	10.0	15.0	990	37		*No 1957 data available.	501
2,010						*Includes primary production since start of flood.	4213
3,243	11.0					*Dump flood. ‡Includes primary production since 1-1-57.	1505
3,245	11.0	21.0				*Includes primary production since start of flood.	1506
1,500	6.7	15.3	310	36.6	3.9 @ 104°F	*No 1957 data available.	3917
2,307	8.0						3918
2,000	14.0					*No 1957 data available.	3919
						*No data available.	3920
2,140	13.0			33.0		*No 1957 data available.	3921
2,075	13.6	19.0	182	38.8		*100% source water since 4-1-57. Prior to this, fresh water had been augmented with brine for injection.	3922
2,230	19.0	18.2	147				3923
1,729	6.0					*Corrected figure.	3924
2,040	11.6	18.9	221	30.0	4.0		3925
2,650	6.5	16.0	60			*Includes primary production since start of flood.	3926
2,650	7.0	16.0	65				3927
2,800	14.3	13.3	2	33.7	4.7 @ 97°F	*Arrow-McBride, Hon-Bump-Crawford water flood.	4214
2,650	10.8	12.7	3	35.5	4.5 @ 96°F	*Arrow-McBride, Hon-Bump-Crawford water flood.	4215
2,600	8.9	15.6	8	34.5	6 @ 96°F	*Arrow-McBride, Hon-Bump-Crawford water flood.	4216
2,900	9.4			34.5	4.2 @ 98°F	*Arrow-McBride, Hon-Bump-Crawford water flood.	4217
2,840	18.3	15.0	20	33.1	4.8 @ 70°F	*Estimated.	4218
2,695	12.0			37.5	3.7 @ 96°F	*Estimated.	4219
2,600	17.0	16.0	35	35.0			3928
							4220
						*No data available.	4221
2,500	15.0	17.0	57	36.1	5.1 @ 94°F	*No 1957 data available.	3907
2,400	12.0					*No 1957 data available.	3947
2,800	30.0	14.0	10	41.0		*Production from Jan. to Nov., 1954 not included. Previously subjected to gas injection.	4224
2,700	15.0					*Included in Aux Vases production.	4225
2,260	19.5	17.9	120	35.5		*Included in Aux Vases production.	4226
						*Includes primary production since 1-1-54. †From 1-1-54.	4227
						*Includes oil and water production from Cypress "C," Aux Vases, Benoist, and Waltersburg.	3936
2,750	12.0	16.0	20			*Included with Cypress "A."	3937
2,640	14.0	17.1	44			*Included with Cypress "A."	3938
2,115	25.0	20.1	171			*Included with Cypress "A."	3939
2,500	20.0	18.0	50	37.5		*Included with Cypress "A."	3940
2,500	10.0	17.0	100	37.5			3929
2,811	28.0			36			3930
							4231
2,680	18.0	17.0	75	36.5	3.8 @ 81°F		3931
2,520	8.5	17.0	57	36.1	5.1 @ 94°F		3932
2,400	8.0	18.5	75	36.2	5.0 @ 90°F		3933
2,620	12.0	17.2	57	37.0	4.6		3934
2,500	25.0	21.0	200			*Total lease production—Cypress, Benoist, Aux Vases, and McClosky commingled.	3935
2,855	10.0	13.0	30	32.5		*Cooperative pilot flood with Calstar.	4233
2,696	12.0			32.5		*Cooperative pilot flood with Calstar.	4234
2,250	13.3	17.3	44	38.0	5.5 @ 85°F		4235
2,460	8.9	17.9	48	36.4	3.7 @ 96°F	*Included with Bethel production.	4236
2,340	12.4	15.4	32	36.8	4.3 @ 94°F	*Figures include cumulative injection and secondary production prior to unit operation. †Cumulative water production from all zones within unit area.	4237

TABLE 13.—

Map No.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
4238	New Harmony C	Superior	White, Ill. Posey, Ind.	Waltersburg U	8-46	Waltersburg
3948	New Harmony C	Swan*	Wabash			Cypress
4240	New Harmony C	Tidewater	White	E. S. Dennis "A"	7-51	Bethel
4241	New Harmony C	Tidewater	White	Evans	10-49	Aux Vases
4242	New Harmony C	Tidewater	White	Evans	1-56	Biehl
4243	New Harmony C	Tidewater	White	Evans		McClosky
4244	New Harmony C	Tidewater	White	E. S. Dennis "A"	9-57	Aux Vases
3949	New Harmony C	West*	Wabash	C. W. Raber	10-56	Biehl
4247	New Haven C	Hiawatha	White	New Haven	7-54	Cypress
4248	New Haven C	Hiawatha	White	New Haven	7-54	Tar Springs
2600	Odin	Ashland	Marion	Odin	10-49	Cypress
000	Old Ripley	Cahill & Smith	Bond	Ripley	9-57	Penn.
3408	Olney C	Texas	Richland	E. Olney	3-51	McClosky
307	Oskaloosa	Texas	Clay	Oskaloosa	1-53	Benoist
3409	Parkersburg C	Ohio*	Richland	Parkersburg U	3-55	McClosky
308	Passport	Magnolia	Clay	Stanley	9-57	McClosky
2601	Patoka	Sohio	Marion	Patoka Ben.	9-43	Benoist
2602	Patoka	Sohio	Marion	Patoka Rosi.	48	Rosiclare
2603	Patoka	Sohio	Marion	Stein U	8-51	Cypress
4249	Phillipstown C	C. E. Brehm	White	Phillipstown U B	1-54	Cypress
4250	Phillipstown C	Bristol*	White	Grayville	8-54	L. Cypress
4251	Phillipstown C	British American	White	N. Calvin	6-51	Penn. #7
4252	Phillipstown C	Magnolia	White	Schmidt-Seifried U	5-51	Biehl
4253	Phillipstown C	Phillips	White	Flora U	9-53	Degonia
4254	Phillipstown C	Phillips	White	Laura	3-52	Bethel
4255	Phillipstown C	Phillips	White	Phillipstown U	10-57	Ben. & A. V.
4256	Phillipstown C	Sun	White	Phillipstown	12-55	Clare
4257	Phillipstown C	Sun	White	Phillipstown	2-56	Tar Springs
4258	Roland C	Carter	White	S. W. Roland	6-55	Waltersburg
4259	Roland C	Carter	White	Stokes	7-54	Hardinsburg
4262	Roland C	T. W. George*	White & Gallatin	Pankey-Morehead U	10-56	Cypress
1413	Roland C	Ind. Farm Bureau	Gallatin	Omaha	3-53	Waltersburg
4260	Roland C	Pure	White	Stokes-Brownsville	4-56	Hardinsburg
4261	Roland C	Shell	White	Iron U	12-50	Hardinsburg
2218	St. Francisville E.	J. E. Bauer	Lawrence	All States Life	11-57	Benoist
1222	St. James	H. Rosenthal	Fayette	Washburn	3-54	Cypress
1905	Ste. Marie	J. R. Randolph	Jasper	Ste. Marie	10-48	McClosky
1100	Sailor Springs C	Ashland	Effingham	Bible Grove	7-54	Rosi. & McCl.
318	Sailor Springs C	Ashland	Clay	E. Flora	11-56	McClosky
319	Sailor Springs C	Breur & Currin*	Clay			Ohara
309	Sailor Springs C	Cities Service	Clay	Wyatt	9-53	Aux Vases
1102	Sailor Springs C	W. Duncan	Effingham	Brink	12-57	Cypress
310	Sailor Springs C	Gulf	Clay	R. Keck	9-57	Cypress
1103	Sailor Springs C	Kingwood	Effingham	Nadler	6-55	Rosi. & McCl.
311	Sailor Springs C	Magnolia	Clay	Sailor Springs U	3-55	Cypress
312	Sailor Springs C	W. C. McBride	Clay	Goldsby-Dickey*	9-55	Cypress
313	Sailor Springs C	W. C. McBride	Clay	Duff-Keck*	7-53	Cypress
314	Sailor Springs C	Phillips	Clay	Bothwell	8-56	Cypress
315	Sailor Springs C	Shulman	Clay	Colclasure	7-57	Cypress
316	Sailor Springs C	Shulman	Clay	Neff**		McClosky
2604	Salem C	Texas	Marion	Rosiclare Sand U	4-50	Rosiclare
2605	Salem C	Texas	Marion	Salem U	10-50	Benoist
2606	Salem C	Texas	Marion	Salem U	10-50	Devonian
2607	Salem C	Texas	Marion	Salem U	4-51	McClosky
2608	Salem C	Texas	Marion	Salem U	10-50	Renault & A. V.
1010	Samsville N.	Ashland	Edwards	W. Salem	9-54	Bethel
3410	Seminary	Pure*	Richland	Seminary	2-54	McClosky
700	Siggins	Bell Brothers	Cumberland	Flood #1	9-50	U. Siggins
701	Siggins	Leland Fikes*	Cumberland	Vevay Park	1-50	Siggins
702	Siggins	Forest	Cumberland	Siggins	6-42	1st Siggins

(Continued)

Information			Production and injection statistics (thousand bbls.)						Map No.	
Location		Curtailed during '57	Secondary recovery							
			Water injection		Oil production		Water production			
Sec.	T.-R.	Inj.	Prod.	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	Total 1957		Cumulative 12-31-57
4, 5, 9, 10	5S-14W			2,635	18,459*	491.8	3,593*	1,257	3,807*	4238
7, 18	3S-13W									3948
28, 33	4S-14W	x		1,000	6,984	14.0	433	358	1,697	4240
4, 5	4S-14W	x		198	1,110	23.7	141	12	207	4241
4, 5	4S-14W	x		241	314	42.6	70	53	61	4242
4, 5	4S-14W	x		124	296	10.2	13	21	24	4243
28, 33	4S-14W	x		71	86	9.6	10	None	None	4244
19	2S-13W									3949
24	2S-14W									
17	7S-11E			123	534	92.0	248*	6	14	4247
17	7S-11E			29	86	11.5	28*	1	4	4248
1, 12, 13	2N- 1E			706	3,865	47.8	1,195			2600
6, 7, 8	2N- 2E									
21	5N- 4W			16*	16*	None	None			000
23, 24, 25, 26	4N-10E	x	x	227	1,451	28.7	117	116	315	3408
26, 27, 34, 35	4N- 5E			688	3,651	120.6	746	288	947	307
29	2N-14W									3409
12	4N- 8E			16	16	1.0	1	1	1	308
20, 21, 28, 29	4N- 1E	x	x	2,881	45,849	54.0	6,296	2,095	31,924	2601
20, 28, 29	4N- 1E	x	x	533	5,504	36.9	1,340*	243	1,773	2602
28	4N- 1E	x	x	101	623	2.1	53*	78	424	2603
19	4S-14W	x	x	None	99*	8.1	45†			4249
20, 29	3S-14W		x	72	333†	16.2	68††	26		4250
31	3S-14W			277	2,170*	52.6	1,046*	298	1,115	4251
30, 31	3S-11E			55	1,003	14.3	405*	62	380	4252
24	4S-10E			133	553	3.6	63	62	246	4253
19	4S-11E			34	80*	0.8	1	0.2	0.2	4254
30	4S-11E			130	130	0.2	0.2	5	5	4255
6	5S-11E			60	113	49.5	73	4	4	4256
6	5S-11E			17	35					4257
14, 15, 16	7S- 8E			1,906	4,021	56.3	77	75	188	4258
5	6S- 9E			534	1,661	99.7	351	249	308	4259
17, 20	7S- 8E									4262
20, 21, 28, 29	7S- 8E			1,221	4,911	224.3	807*	819	1,455	1413
36	5S- 8E			1,865	3,278	641.0	670	145	150	4260
31, 32	5S- 9E									
1, 12	6S- 8E									
6	6S- 9E									
23, 24, 25	6S- 8E			1,094	7,823	175.8	1,528	938	3,000	4261
22	2N-11W			48	48	None	None	48	48	2218
30	6N- 3E		x	132	334*	39.3†	119†	132	334*	1222
5, 6, 7, 8	5N-14W			108*	1,760*	33.0†	172†	30†	60	1905
28, 29	6N- 7E			258*	656*	21.3	48†			1100
16, 21	3N- 7E			135	150	16.2	19*			318
18	3N- 7E									319
13	5N- 7E			79	363	4.8	30	69	229	309
34	6N- 7E			6	6	None	None	None	None	1102
26	4N- 7E			10	10	2.7*	3*	5	5	310
28	6N- 7E			180*	382*	15.7	41†	92	130	1103
14, 15, 23	4N- 7E			559	1,622	110.5	401	227	597	311
34	4N- 7E	x	x	86	167	4.5	6	30	33†	312
26, 35	4N- 7E	x	x	128	294	9.9	52	26	54†	313
14	3N- 7E			34	49	1.2	1			314
10	3N- 7E			22	22	0.8	1	12	12	315
16	3N- 7E			15*	15*	None	None	1*	1*	316
15	1N- 2E			135	1,329	9.5	76	10	165	2604
	1 & 2N-2E			36,802	147,324	3,193.3	14,028	22,369	53,468*	2605
	1 & 2N-2E			5,471	44,136	71.4	458	1,542	12,634*	2606
	1 & 2N-2E			12,595	57,021	902.7	3,019	4,130	17,074*	2607
	1 & 2N-2E			11,728	26,876	413.9	922	1,171	5,670*	2608
30	1N-14W			59	211	1.0	7*			1010
17, 20	2N-10E			60†	889†	4.1†	24†	27†	287†	3410
13	10N-10E			32	347*	18.5	123	20	130	700
35	10N-14W									701
7, 11, 12	10N-11E			3,597	45,992	683.8	7,969			702
13, 14	10N-10E									

TABLE 13.—

Map No.	Development as of 12-31-57						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Av. well-head pressure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
4238	6	15	Split Line		725	725	Shallow & Prod	F & B	28.0	1,169
3948										
4240	18	12	5-Spot	10	160	185	Shallow Gr	F	5.1	1,400
4241	7	7	5-Spot	20	140	160	Shallow Sd	F	3.2	1,333
4242	6	8	5-Spot	20	40	110	Shallow Sd	F	6.9	1,600
4243	5	7	5-Spot	20	70	167	Shallow Gr & Prod	F		1,600
4244	12	10	5-Spot	10	120	160	Shallow Gr	F	2.5	1,400
3949										
4247	8	7			390	477	Well	F	4.2	1,190
4248	3	5			390	447	Well	F	2.4	1,190
2600	10	20	Perimeter		230	290	Tar Springs	B	12.9	835
000	4	10				160	River & Prod	F & B	4.0	
3408	3	13			460	515	Penn. Sd & Prod	F & B	39.1	1,005
307	10	32	Perimeter	10	407	407	Penn. Sd & Prod	B	1.3	1,258
3409										
308	1	2			10	60	Cypress	B		
2601	65	65	5-Spot	10	527		Tar Springs	B	4.5	260
2602	16	11	Perimeter		445	445	Tar Springs	B	10.1	425
2603	5	5	Peripheral		61	61	Tar Springs	B	5.5	538
4249	2	6			80	80	Penn. Sd	B		
4250	4	5			128	128	City	F	5.5	1,281
4251	10	17	5-Spot	10	130	130	Prod	B	2.6	870
4252	5	9	5-Spot	20	53	130	Shallow Sd & Prod	F & B		
4253	2	4	5-Spot	10	25	70	Shallow Sd & Prod	F & B	12.2	1,216
4254	1	2			16	40	Prod	B	9.4	1,213
4255	5	13	Mod. 5-Spot	10	100	180	Penn. Sd	B	21.7	1,143
4256	1	5			50	135	Prod	B	16.4	310
4257	1	4			40	135	Prod	B	6.6	1,484
4258	7	22	Flank		556	577	Penn. Sd	B	57.4	78
4259	7	7	5-Spot	20	94	209	Penn. Sd	B	18.0	720
4262										
1413	11	22	Flank	10	336	336	Prod	B	21.7	
4260	37	31	5-Spot	20	590	770	Penn. Sd	B	9.2	650
4261	20	24	5-Spot	20	390	430	Tar Springs & Prod*	B	6.0	524
2218	5	5		10	160	160	Prod	B	5.8	753
1222	3	9			95	95	Prod	B	6.0	200
1905	1	14			400	500	Cypress	B	42.3	None
1100	4	9	Irregular		180		Cyp. & T. S.	B		
318	3	9		40	160	160	Prod	B	20.5	None
319										
309	2	2			10	30	Penn. Sd	B	11.7	
1102	1	3		10	40	40	Penn. Sd	B	128.0	250
310	1	1							16.4	
1103	2	3	Perimeter	20	120	120	Cypress	B		
311	11	23	Irregular		202	350	Penn. Sd & Prod	B		
312	1	4	5-Spot	10	40	40	Prod	B	15.8	188
313	5	8	5-Spot	20	140	140	Penn. Sd	B	5.9	746
314	1	1		10	10	20	Prod	B	9.4	
315	1	5			80	80	Prod	B	8.1	479
316	2	1		20	80	80	Cypress	B		
2604	3	4	Flank	10	100	100	Penn. Sd	B	8.8	782
2605	199	447	Peripheral & 25% 5-Spot	20	7,975	7,975	Gr & Prod	F & B	18.1	491
2606	26	32	Peripheral		5,414	5,414	Gr & Prod	F & B	30.3	
2607	129	289	Peripheral		7,712	7,712	Gr & Prod	F & B	13.4	527
2608	75	60	Peripheral		4,881	4,881	Gr & Prod	F & B		584
1010	1	1			20	35	Prod	B	32.3	529
3410	2	4			173	173	Cypress	B		
700	9	7	5-Spot	4.4	80	80	Surf. & Prod	F & B	0.6	215
701										
702	493	407	5-Spot	4.4	1,800		Gr & Prod*	F & B	0.6	240

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,200	43.0	19.2	475	36.8	2.9 @ 86°F	*Includes Indiana data. Previously subjected to gas injection.	4238
2,700	30.0	16.0	50	39.0	2.2 @ 92°F	*No data available.	3948
2,800	24.0	14.5	50	39.0		*Cumulative for Tidewater operated wells. Previously subjected to gas injection.	4240
1,800	16.0	12.8	17	32.0		Previously subjected to gas injection.	4241
3,000	20.0					Previously subjected to gas injection.	4242
2,800	15.0						4243
1,740	15.0	20.6	39	37.0			4244
2,445	10.0					*No 1957 data available.	3949
2,110	11.0					*Includes primary production since start of flood.	4247
						*Includes primary production since start of flood.	4248
1,700	15.0	20.0	78	38.0	8.3 @ 69°F		2690
600	18.0					*Estimated figures.	000
3,100	5.3	13.8	522	36.0	2.6 @ 99°F		3408
2,600	14.2	15.6	54	37.8	6.4 @ 60°F		307
3,150	5.0	20.0				*No 1957 data available.	3409
3,015							308
1,410	27.0	19.0	110	39.0			2601
1,550	9.0	18.8	223	40.0	4.1	*Includes primary production since start of flood.	2602
1,280	10.0	21.0	32	39.0	5.5 @ 60°F	*Includes primary production since start of flood.	2603
2,750	12.0					*Injection shut down June through Dec., 1956. ‡Includes primary production since start of flood.	4249
2,850	9.6	18.6	64	34.5	5.2 @ 95°F	*Previously operated by S. C. Yingling. †Corrected figures. ‡Includes primary production since start of flood.	4250
1,550	29.0	17.6	86	32.0	20.0	*Corrected figures.	4251
1,830				32.2	11.2 @ 78°F	*Includes primary production since start of flood.	4252
2,000	15.0	19.0	100	37.0			4253
2,800	10.0	15.0	46	37.0			4254
2,850	13.0	15.5	50	35.5		*Input well shut down between 8-16-54 and 9-13-56.	4255
2,000	10.0						4256
2,300	7.0						4257
2,175	13.0	19.5	292	30.0	9.2 @ 83°F		4258
2,530	11.6	18.8	259	38.5			4259
2,620	20.0	14.0	16			*No 1957 data available.	4262
1,695	14.0	19.0	225	29.2	8.0 @ 32°F	*Includes primary production since start of flood. Previously subjected to gas injection.	1413
2,628	15.5	17.3	106	38.6			4260
2,500	25.0	17.6	152	38.5		*Due to mixed brine problems, wells recently converted to 100% source (Tar Springs).	4261
1,740	27.0	17.0	40	36.5	10.0 @ 60°F		2218
1,595	20.0			34.0		*Cumulatives to 12-31-56 were estimates. †Total oil production.	1222
2,860	7.0					*Dump flood, estimated injection. ‡Excluding 1-1-56 through 12-31-56. †Since 1-1-56.	1905
2,850				37.0		*Controlled dump flood. ‡Includes primary production since start of flood.	1100
2,950	6.0	15.0	800			*Includes primary production since start of flood.	318
						*No data available.	319
2,771	9.2	17.0	50	34.2			309
2,530	7.0						1102
2,856	15.0					*Includes primary production since 10-1-57.	310
						*Dump flood, estimated injection. ‡Includes primary production since start of flood to 12-31-56.	1103
2,600							311
2,580	15.0	15.4	17	38.0		*Pilot flood. †Since 3-1-56.	312
2,600	12.0	19.0	60	38.0		‡Since 1-1-55. *Formerly duff pilot flood.	313
2,650	10.0	19.0	20	36.0			314
2,620	15.0			38.0			315
3,000	5.0			36.0		*Since 1-1-57. ‡Dump flood.	316
2,093	14.0	11.5	43	36.5			2604
1,770	28.0	17.9	150	37.0	3.9 @ 93°F	*Since 1-1-52.	2605
3,400	19.0	16.8	300	36.5		*Since 1-1-52.	2606
1,950	20.0	15.8	700	37.0		*Since 1-1-52.	2607
1,825	R- 7.0 A.V.-26.0	16.4	R- 18 A.V.-28	37.0	4.6 @ 93°F	*Since 1-1-52.	2608
2,930	5.0						1010
3,000	8.0			36.0		*Includes primary production since start of flood to 12-31-56.	3410
320	16.0	18.9	73	34.0	12.0 @ 63°F	*Sold to R. Johnson. †As of 4-1-57. ‡Estimated.	700
600	16.0	20.3	349	30.1		*1954-57 injection in joint-operated wells not included.	701
490	32.0	17.5	56	36.6	8.0 @ 60°F	Previously subjected to gas injection.	702
						*No 1957 data available.	
						*Separate plants for fresh water and for brine. Previously subjected to gas injection.	

(Continued)

Information			Production and injection statistics (thousand bbls.)							Map No.
Location		Curtailed during '57	Secondary recovery							
			Water injection		Oil production		Water production			
Sec.	T.-R.		Inj.	Prod.	Total 1957	Cumu- lative 12-31-57	Total 1957	Cumu- lative 12-31-57	Total 1957	
7	10N-14W			244	1,726	41.4	149	142	252‡	215
7	10N-11E									
13	10N-14W			1,142	14,143	88.3	2,287	1,183	10,657	216
18	10N-11E									
2, 9, 16, 17	2N- 7E			596	2,378	20.7	368	298	782	317
	6S- 9E			2,165	3,774	13.4	15	919	1,154	4263
31	5N-14W			67	217	3.9	13*	69	221	3411
31	5N-14W	x	x	60	171	0.9	5	38	57	3412
31	5N-14W			56	171	8.7	40	76	232	3413
31	5N-14W									3414
12	7S- 4E			165	480	21.7	67	55	104	1302
3, 9, 10	7S- 4E			390	965	136.2	150	109	165	1303
9	7S- 4E			315	628	130.7	132	19	19	1304
10, 15	7S- 4E	x		2	551	0.1	21	1	40	1305
4	2N- 2E			72‡	144‡	26.7*	88*	99‡	189‡	2609
30	1N- 1E				32‡	1.4*	4*			2610
19, 30	1N- 1E			51	51	3.9	4	8	8	2611
7, 18	11N-11E			116	1,040	1.9	11	28	51‡	502
18	11N-14W									
6	6N-11E			22	22	1.7	2	0.4	0.4	1906
					194‡	12.3*	23*†		194‡	002
18, 19	7S- 3E			67	67	0.8	1	1	1	1306
6	9N-11E									703

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
447	56.0	21.5	40	33.8	10.5 @ 68°F	*Previously operated by Ree. †Excluding 1-1-56 through 12-31-56. ‡Previously subjected to gas injection.	215
404	25.0	18.4	45	36.0	8.8 @ 68°F		216
464	6.0		66				
2,975	11.8	19.8	97	38.8	3.7		317
2,214	25.0			33.0		*Pilot flood.	4263
3,000	10.0	18.0		38.0		*Includes primary production since start of flood.	3411
3,026	7.0			36.0			3412
3,002	12.0						3413
3,200	18.0	21.1	98	38.0		*No data available.	3414
3,075	25.0	22.0	170	37.5			1302
							1303
3,060	14.0	21.0	115	39.0	3.2 @ 90°F	*Temporarily abandoned 8-56 to 10-57. †Injection pattern modified to flank, 8-56.	1304
3,120	16.0	19.5	50	38.6	3.5 @ 90°F	*Estimated. †As of 1-1-57.	1305
1,940	9.0					‡As of 1-1-56. *Estimated.	2609
750	20.0	20.3	183	30.0	19.9 @ 68°F	*Formerly operated by Stinson.	2610
320	35.0	21.5	86	29.0		*Previously operated by Ree. †Excludes 1-1-56 through 12-31-56.	2611
2,634	9.5						502
						‡As of 1-1-56. *Estimated. †Includes primary production to 1-1-56.	1906
2,050	31.3	17.1	155	37.4			002
590	10.0	21.9	231	30.3		*No 1957 data available.	1306
							703

TABLE 14.—ILLINOIS WATERFLOOD

Map No.	General					
	Field C=Consolidated	Operator	County	Date first injection	Project U=Unit	Date abandoned
1014	Albion C	Continental	Edwards	5-43	Stafford	12-56
1015	Albion C	First Nat. Pet. Trust	Edwards	4-52	Brown	12-55
1012	Albion C	Superior	Edwards	7-46	S. Albion U #2	*
3944	Allendale	Ind. Farm Bur.	Wabash	11-53	Woods	6-57
4129	Barnhill C	Wayne Development	Wayne	12-50	Walter	1-55
3942	Berryville C	Phillips	Wabash	9-52	Tarply	2-53
3943	Berryville C	Phillips	Wabash	2-52	Townsend	7-53
217	Casey	Calvan American	Clark	8-53	Shawver	7-54
4267	Centerville E	Lesh	White	6-54	Centerville E	12-55
4246	Centerville E	Sun	White	10-50	E. Centerville	8-57
408	Centralia	Sohio	Clinton	11-51	Copple Town	*
4130	Clay City C	Gulf	Wayne	8-55	Winona	10-56
4228	Concord	Great Lakes Carbon	White	6-53	McClosky	12-56
4229	Concord	Phillips	White	8-53	Dallas	1-57
3945	Friendsville N.	Magnolia	Wabash	7-47	J. L. Litherland	9-57
4128	Goldengate C	Cities Service	Wayne	10-53	Goldengate	8-57
2200	Lawrence	Calvan American	Lawrence	12-53	Piper	9-56
2229	Lawrence	Calvan American	Lawrence	3-53	Waller	11-55
2230	Lawrence	Ree	Lawrence	10-52	Snyder	55
662	Main C	Petroleum Products Co.	Crawford	9-51		12-56
663	Main C	Ree	Crawford	11-53	Meserve	5-55
661	Main C	Skiles	Crawford	7-51	Correll-Curley	9-55
664	Main C	Skiles	Crawford	12-51	Walter-Comm.	12-52
665	Main C	Skiles	Crawford	11-52	Weger	7-56
2007	Markham City	Tidewater	Jefferson	8-55	Newton Investment	57
218	Martinsville	J. B. Buchman	Clark	10-52		54
219	Martinsville	Magnolia	Clark	1-51	Carper	2-55
220	Martinsville	Magnolia	Clark	8-50	Casey	2-53
4239	Maunie South	Magnolia	White	11-55	Maunie Coop.	
4230	Maunie South	Magnolia	White	8-47	Tar Spr. U	12-57
4268	Maunie South	Magnolia	White	11-49	Tar Spr. U #2	55
3946	Mt. Carmel	First Nat. Pet. Trust	Wabash	2-50	Shaw Courter	12-56
3941	Mt. Carmel	First Nat. Pet. Trust	Wabash	4-53	Shaw Courter	12-56
4222	New Harmony C	Skiles	White	5-55	Smith-Davenport	10-57
4269	New Harmony C	Sun	White	3-48	Ford "A"	7-52
4223	New Harmony C	Sun	White	8-47	Greathouse	1-57
3415	Parkersburg C	Calvert	Richland	1-55	Parkersburg	56
4245	Phillipstown C	C. E. Brehm	White	6-52	Phillipstown U "A"	5-57
4232	Phillipstown C	Skiles	White	11-55	L. O. Cleveland	12-56
4270	Phillipstown C	Sun	White	1-53	Phillipstown	3-54
4271	Storms C	Mabee	White	7-51		6-53
222	Westfield	Forest	Clark	6-50	Parker	12-56
221	Westfield	Ree	Clark	8-51	Hawkins	54
1907	Willow Hill E.	M. M. Spickler	Jasper	6-52		12-56

PROJECTS REPORTED ABANDONED

Information			Production and injection statistics (thousand bbls.)			Map No.
Formation	Location		Cumulative water injection	Cumulative secondary oil produced	Cumulative water produced	
	Sec.	T.-R.				
McClosky	13	2S-10E	625	43.1*	637	1014
Aux Vases	6	2S-11E	*	*	*	1012
Bridgeport	1, 11, 12	3S-10E	*	*	*	1012
Biehl	20	1N-12W	633	44.8‡	559*	3944
McClosky	26	2S- 8E	144		119	4129
McClosky	2	1N-14W	35	None	103	3942
McClosky	35	2N-14W	50	None	86	3943
Casey	23, 24	10N-14W	49	1.8		217
Rosiclare	12	4S- 9E	*	4.4	4‡	4267
Tar Springs	7	4S-10E	269	39.2	132	4246
Trenton	35	2N- 1W	236	34.0‡	21	408
McClosky	12	1S- 8E	25	None	0.3	4130
Rosiclare & McClosky	28	6S-10E	234*	5.1*	44	4228
Rosiclare & McClosky	28	6S-10E	247	3.0	42	4229
Biehl	1, 12	1N-13W	623	142.1*	282	3945
McClosky	28, 32, 33	2S- 9E	926	7.0*	281	4128
Cypress	2, 11	4N-13W	146*	5.8‡		2200
Cypress	5, 6	2N-11W	828	12.3		2229
Cypress	30	3N-11W	16*	0.6*	69*	2230
Robinson	29, 32	8N-12W	445			662
Robinson	11	6N-13W	251	1.2	39	663
Robinson #4	10	7N-12W	1,207	29.8	227	661
Robinson #1 & #3	1	6N-13W	26	None	29	664
	36	7N-13W				
Robinson	18, 19	5N-11W	777	8.5	109	665
	13, 24	5N-12W				
McClosky	1	3S- 4E	*	.8‡		2007
Carper	31	10N-13W	283*	None	5*	218
Carper	30	10N-13W	1,111	10.4	10	219
Casey	19	10N-13W	872	2.3	34	220
Tar Springs	24	6S-10E	180	11.2	141	4239
Tar Springs	19, 24, 25	6S-10 & 11E	4,748‡	792.4*	2,049	4230
Tar Springs	24	6S-10E	639	60.3	209	4268
	19	6S-11E				
Biehl	7	1S-12W	364	68.6	148*	3946
Cypress	7	1S-12W	259	28.4	10*	3941
Cypress	15	4S-14W	147	3.8	2	4222
McClosky	18	5S-14W	58	13.1	1	4269
McClosky	33	4S-14W	1,088	128.7	227	4223
	4	5S-14W				
McClosky	16, 21	2N-14W	107*	None	43*	3415
Penn.	30	4S-11E	311	68.3*		4245
	19, 30	4S-14W				
Tar Springs	36	4S-10E	48	0.1	None	4232
Tar Springs	6	5S-11E	58	None	251	4270
Waltersburg	22	6S- 9E	90	None		4271
"Gas Sand"	30	11N-14W	663	34.4		222
"Gas Sand"	20, 21	11N-14W	265*	2.0*	44*	221
McClosky	36	7N-10E	*	2.1‡		1907

TABLE 14.—

Map No.	Maximum development during operation						Injection water	
	No. wells		Injection pattern	Spacing	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine
	Inj.	Prod.			Subj. injection	Total		
1014	1	1	Spot	10	80	80	Prod	B
1015	1	1			30	20	Hardinsburg	B
1012	*	*			203		Prod	B
3944	5	7	5-Spot	10	147	147	Prod	B
4129	1	2		10	40	40	Cypress	B
3942	1	2			14	30	Prod & Tar Springs	B
3943	1	2			27	30	Prod & Tar Springs	B
217	9	4		4.4	13	215	Shallow Sd	F
4267	1	1			20	20	Tar Springs	B
4246	1	5			80		Tar Springs & Prod	B
408	2	12		20	160	200	Devonian	B
4130	1	1		12.5	13	50	Tar Springs	B
4228	3	8			140	150	Gr Bed	F
4229	1	3	Modified Peripheral		40	60	Shallow Sd & Prod	F & B
3945	2	3	5-Spot	10	13	40	Shallow Sd	F
4128	2	8	Irregular		159	210	Gr Bed	F
2200	4	8	5-Spot	10	13	143.6	Shallow Sd	B
2229	8	8	5-Spot	10	35	625	Gr Bed	B
2230	1	2			10	230	Tar Springs	B
662	4	2	5-Spot	10	10	700	Sh. Sd & Prod	F
663	4	4	5-Spot	10		525	Penn. Sd	B
661	18	17	5-Spot	10	180		Creek & Penn. Sd	F & B
664	5	6	5-Spot	10	40		U. Penn. Sd	B
665	9	11	5-Spot	10	90	110	Creek & Prod	F & B
2007	1	1	Dump		40	40	Cypress	B
218	2	6	5-Spot	20	40	40	Shallow Sd	F
219	4	1	5-Spot	10	10	50	Gr Bed	F
220	8	3	5-Spot	10	23	110	Gr Bed	F
4239	1	3	Irreg.		18	80	Gr & Prod	F & B
4230	2	4	5-Spot	20	138	230	Gr & Prod	F & B
4268	3	2	5-Spot	20	50	50	Gr Bed	F & B
3946	1‡	2	Spot	10	30	30	Water Well & Prod	F & B
3941	1	4	Spot	10	50	50	Water Well	F
4222	1	2	Irreg.		30	30	Tar Springs	B
4269	1	1	Spot		40	40	Gr Bed	F
4223	1	1			50		Gr Bed	F
3415	2	7		20	160	160	McClosky	B
4245	1	5	Irreg.		90	90	Penn. Sd	B
4232	1	2	Irreg.		30	30		B
4270	1*	9			10		Prod	B
4271	1	2			40	40	Penn. Sd	B
222	9	12	5-Spot	2.5	20		Gr Bed	F
221	15	8	5-Spot	4.4	40	360	Devonian & Prod	F & B
1907	1	1			20	20	Prod	B

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
3,222	4.0	16.3	898	39.0		*Includes primary production to 12-31-56.	1014
3,005	21.0					*Dump flood.	1015
1,990	20.0	19.7	304	32.5	6.3 @ 95°F	*Abandoned and converted to disposal project in 1952, but reinstated as an active flood during 1956. See table 15.	1012
1,520	15.0			28.4	8.9 @ 32°F	*1-1-55 to 7-1-57. ‡Includes primary production to 12-31-56.	3944
3,450	18.0						4129
2,890	10.0						3942
2,890	10.0						3943
450	21.5	22.4	108	31.8	13.6 @ 65°F		217
3,366	7.0			43.0		*Dump flood. ‡From 1-1-55 to 12-4-55.	4267
2,530	6.0			36.6			4246
3,950	22.0	10.0		39.8	2.7	*Pilot flood, reported as abandoned in March, 1953. ‡Includes primary production from 11-51 to 3-53.	408
3,115	8.0	12.0		40.1			4130
2,980	22.0			37.5			4228
2,960	30.0	15.0	50	36.0		*As of 1-1-55.	4229
1,620				35.6		*Includes primary production to 12-31-56.	3945
3,308	8.0			34.0		*Corrected figure.	4128
1,520	25.0	20.8	33	38.6	3.5 @ 86°F	*As of 5-1-56. ‡As of 8-15-56.	2200
1,535	50.0	18.5	70	39.5	5.0 @ 85°F		2229
1,580	25.0	21.2	125	38.6	4.1 @ 85°F	*As of 1-1-55.	2230
1,000	15.0	20.0	75	37.5	7.3 @ 76°F		662
950	22.7	21.9	89		10.0 @ 79°F		663
1,035	20.0	22.2	100	33.0	13.5		661
950	10.0	20.1	93	36.0	12.5 @ Reservoir Temperature		664
1,010	15.0						665
900	20.0	17.0	37				2007
3,080	6.0					*Dump flood. ‡Total production since 1-1-56.	218
1,346	40.0	16.0	11	30.0		*As of 1-1-54.	219
1,334							220
464							4239
2,275				37.3	4.6 @ 89°F	*Includes primary production to 12-31-56. ‡Corrected figure.	4230
2,270							4268
2,275							3946
1,375	16.0			40.2	4.7 @ 70°F	*As of 1-1-56. ‡During 1956, injection well used as a straight disposal well.	3941
2,050	12.0					*As of 1-1-56.	4222
2,630	10.0	17.7	145				4269
2,900	7.0			38.0			4223
2,900	5.0			36.9			3415
3,062	10.0					*As of 1-1-56.	4245
1,912	23.0	13.0	36	38.0	4.5 @ 84°F	*Includes primary production to 12-31-56.	4232
2,300	12.0						4270
2,248	10.0			34.5		*Abandoned after unsuccessful input well fracture treatment.	4271
2,241	15.0						222
270	25.0	17.9	153	28.1	54.0 @ 60°F	Previously subjected to gas injection.	221
290	30.0	22.0	120	30.0	28.0 @ 62°F	*As of 1-1-54.	1907
2,615	10.0					*Dump flood, not in operation during 1956. ‡As of 1-1-55.	

TABLE 15.—ILLINOIS PRESSURE MAINTENANCE PROJECTS

Map No.	General					
	Field C=Consolidated	Operator	County	Project U=Unit	Date first injection	Formation
1011	Albion C	Calvert	Edwards	South Albion Lower Biehl	4-51	Biehl
1012	Albion C	Superior	Edwards	S. Albion U #2*	7-46	Bridgeport
001	Beaver Creek	Conrey & Conrey	Bond	Wrone Lse.	7-53	Benoist
405	Beaver Creek S.	Conrey & Conrey	Clinton	Kneier-Ragland	4-56	Benoist
2005	Boyd	Superior	Jefferson	Boyd Repressure	6-45	Benoist
1013	Bone Gap C	Gallagher	Edwards		6-52	Waltersburg
406	Germantown	Nap Co.	Clinton	Germantown	9-56	Devonian
407	Carlyle N.	Conrey & Conrey	Clinton	Krietemeyer		Benoist
4264	Enfield S.	Ryan Oil	White	S. Enfield U #1	1-55	Aux Vases
1223	Louden	Carter	Fayette	Louden Devonian	9-43	Devonian
4265	Maunie S.	Nap Co.	White	S. Clear Pond	6-57	Tar Springs
1414	Omaha	Carter	Gallatin	Omaha	10-44	Palestine
4266	Phillipstown C	Nap Co.	White	Stokes "B" #3	6-56	Benoist
2006	Salem C	Carter	Jefferson	Dix (R & P. M.)	1-48	Bethel

TABLE 15.—

Map No.	Development as of 12-31-57						Injection water			
	No. of wells		Injection pattern	Spacing acres per input well	Productive acreage		Source Sd=Sand Gr=Gravel Prod=Produced	Type F=Fresh B=Brine	Av. bbls. per day per well per ft.	Av. well-head pressure PSI
	Inj.	Prod.			Sub-jected to inj.	Total				
1011	2	7	Peripheral		60	119	Prod	B	33.1	
1012	2	13	Mod. Flank		260	260	Gr & Prod	F & B	12.3	25
001	1	4		10	40	50	Prod-Benoist	B		
405	1	5		10	50		Prod-Benoist	B	7.6	
2005	4	85	Peripheral		1,564	1,564	Surface & Prod	F & B		
1013	1	9			40	120	Prod	B	11.4	450
406	1	12		20	20	300	Prod	B		350
407	1	2			20		Benoist	B		
4264	3	5	None		150	300	Fresh Water	F	20.8	1,090
1223	7	57	Peripheral		2,600	2,600	Prod	B		230
4265	1	5	Line	10	10	100	Prod	B		
1414	1	16	Flank		280	280	Prod	B	24.9	250
4266	1	8			80	80	Prod	B	46.3	1,380
2006	4	63	Peripheral		1,200	1,200	Penn. & T. S.	B	51.3	340

USING WATER INJECTION DURING 1957

Information				Production and injection statistics (thousand bbls.)						Map No.
Location		Curtailed during '57		Secondary recovery						
				Water injection		Oil production		Water production		
Secs.	T.-R.	Inj.	Prod.	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	Total 1957	Cumulative 12-31-57	
35, 36	2S-10E		x	222	1,026	37.7	584‡	245	789*	1011
1	3S-10E									
1, 2, 11, 12	3S-10E			110	2,203	†	†		2,393	1012
36	4N- 3W	x	x			1.0	15			001
12	3N- 3W	x		23	30	7.3	62			405
13, 24, 25	1S- 1E			*	9,714*	*	9,777*†	*	10,866*	2005
18, 19, 20, 30	1S- 2E									
18	1S-14W			83	732	24.4	315	83	732	1013
1	1N- 4W	x	x	561	777					406
23	3N- 3W					3.9				407
29, 32	5S- 8E			182	381	36.9	164	91		426‡
	8N- 3E	x	x	10,212	132,461	416.2	16,629	8,067	121,879	1223
12	6S-10E			9	9			9	9	4265
33	7S- 8E		x	154	1,380	85.9	2,209	154	1,412	1414
4	8S- 8E									
26	4S-10E			135	200			135	200	4266
3, 4, 9, 10, 15, 16	1S- 2E		x	898	5,524	374.9	8,368	469	4,475	2006

(Continued)

Reservoir statistics (average values)						Remarks	Map No.
Depth feet	Net pay thickness feet	Porosity per cent	Permeability millidarcys	Oil gravity API	Oil viscosity centipoises		
2,080	9.2	16.8	384	32.3	10.4 @ 85°F	*1956 cumulative 5-52 to 2-56. †Total production. *Temporarily abandoned—reinstated in 1956. Bridgeport pressure maintenance as of 8-1-56. †Production since 8-1-56 included in Biehl.	1011
1,360	12.2	20.2	323	35.7	5.5 @ 83°F		1012
1,140	8.0	20.7	208	32.4		*Converted to water flood status 1-1-55. All figures as of 1-1-55. †Includes Aux Vases production up to 1-1-55.	001
1,111	8.0						405
2,065	17.3	17.5	173	39.5	3.2 @ 90°F		2005
2,310	20.0	18.0	120	34.6	5.6 @ 85°F		1013
2,300	60.0						406
3,260	8.0	21.5	142		3.5 @ 101°F		407
3,100				29.0			4264
							1223
2,200	12.0						4265
1,700	17.0	18.9	427	27.0	17.0 @ 76°F		1414
2,858	8.0			38.0			4266
1,950	12.0	16.4	128	39.0	2.5 @ 87°F		2006

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